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DOCTOR OF PHILOSOPHY

Deploying collaborative artistic co-creative methods to strategically promote eco-social regeneration for small island communities

Donkers, Laura

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Deploying collaborative artistic co-creative methods to strategically promote eco-social regeneration for small island communities

Volume 2

Laura Donkers, BFA, MFA

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Acknowledgements

Developing an ability to live well on an island, such as Uist (Outer Hebrides), was coupled with an awareness that my newly acquired skills had been afforded largely through the generosity of my neighbours, friends and wider community. Having been brought up as an independent, self-determining urbanite it often felt precarious to place myself in their hands: but their talents and kindnesses in sharing knowledge, resources and guidance disarmed any pretence on my part that I might know a better way. And so, I began to learn how to live in a place like Uist, and it is where some of the nascent ideas for this thesis were seeded.

I am indebted to these neighbours, friends and wider community for all they have given me in the way of practical life skills, as well as the softer skills that are necessary to live sensitively around people who live close to each other and to nature. I have aimed to demonstrate this approach throughout my PhD journey, and in this way realise that their cultural values have greatly influenced mine.

I would like to express sincere gratitude to my First Supervisor, Professor Mary Modeen, who has supported me throughout this long period, and wisely brought Dr Iain Biggs onto the team at a critical stage of research. Their extensive and mutual interdisciplinary skills and experience has guided and underpinned my progress throughout.

The Scottish Graduate School of Art and Humanities (SGSAH) has been a generous supporter of my research activities, enabling me to carry out vital, first-hand enquiries into Māori knowledge in Aotearoa/New Zealand, and for this, as well as several other opportunities, I am very appreciative. Their support came about through the AHRC Creative Economies Studentships, which provided for Creative Industry partners to join my team. To this end, Dr Ben Twist, of Creative Carbon Scotland, and Ruth Wolstenholme, of Sniffer, came on board as advisors, and I appreciate the time they have given me, and thank them for their support and interest.

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I would like to take the liberty of echoing Dr Iain Biggs in a quotation from James Leach who writes, in *Creativity, Subjectivity and the Dynamic of Possessive Individualism* (2007): 'If you are made up of –and manifest physically –other people's work, input, substance and knowledge, then you do not in fact own yourself or anything you produce as an individual.' This statement may seem to undermine the idea of a PhD thesis being solely the work of the researcher, but what interconnected living has taught me is that we know so much more when we acknowledge that we think and act through and with each other.

This leaves me, finally, to thank the ones to whom I am closest, and most bound up with, my close family and friends, especially Lorraine, for your love and care throughout the ten years of our art journey together. Thank you, Kevin, Sian and Laurence, for teaching me as you learned, and for loving, advising and encouraging me in so many ways. And, to my dear Geert, thank you for believing in me from the start.

Declaration

I, Laura Donkers, hereby certify that this thesis, *Deploying collaborative artistic co-creative methods to strategically promote eco-social regeneration for small island communities*, has been written by me; cites references that unless otherwise stated have been consulted by me; is a record of work carried out by me; and has not been previously accepted for a higher degree.

25th March 2020

Abstract

Art can help us to comprehend, through our sentient bodies and in our cognitive capacities, how to live well together at a time of increasing social isolation, climate crisis and growing alienation from our place in the ecological system. Art-related activities can be featured as ways of embedding knowledge that is deeply connected to everyday life precisely within and bound to our immediate environment. This transformative approach is achieved through art by drawing our attention to how we live together with each other, and our non-human companions, in our communities.

At a time of crisis, this practice-led thesis presents how collaborative and co-creative eco-social art practices can contribute to ecological and social regeneration within communities. It addresses three specific questions: How can co-creative artistic approaches help to develop strategic promotion of eco-social sustainability? How can this knowledge be deployed for the benefit of the community and organisations concerned with climate change? How can a community's embodied knowledge contribute to generating an environmentally sustainable future?

This research considers the performative and participatory elements of artists practices that involve others (communities, as well as policy makers, community organisations, national bodies) in discourse and activity on eco-social regeneration. It begins by exploring the agency of ecological and social embeddedness and presents ways to develop the practice and identity of environmental artists who work in community settings. It goes on to show, through project design and activity, and through the development of a 'listening paradigm' that 'island communities' embodied knowledge' can contribute a valuable legacy to community projects addressing climate change. Consequently, by shifting understanding of this under-valued knowledge, new approaches can be suggested to the work of organisations and practitioners tasked with delivering climate change initiatives that enable more effective eco-social engagements with their communities.

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Chapter 1: Outline of Thesis

1.1 Introduction

The making of art, the participation in co-creating art, and the reflection on works by contemporary artists, may often be seen as activities that are separate from the daily business of ‘ordinary life’ and ordinary activities. Yet these art-related activities need not be understood as exotic or extraneous events, and instead can be featured as ways of embedding knowledge that is deeply connected to everyday life precisely within and bound to our immediate environment. This transformation in embedding knowledge is achieved through art by drawing our attention to how we live with each other, emplaced in our environments and in our communities. As such, the process of art making, co-responding and co-creating, and contemplating artworks can help us to engage fully and to deploy further these creative actions as a means to help effect more interconnected ways of being. That is, interconnectedness - if it is defined as a seamless ontology of being-in-place, and knowing ourselves to be sentient and cognitive beings inhabiting both a natural and manmade environment - insists on the consequences of actions and effects. Art, then, in attending to these linked causes-and-effects, has the potential to become a bridge between what we humans know and what we feel. This is also not to exclude our co-inhabitants, the non-human companions, with whom we share this environment. Art can help us to comprehend, through our sentient bodies and in our cognitive capacities, the value in working towards a better understanding of how to live well together at a time of increasing social isolation, climate crisis and growing alienation from our place in the ecological system.

Artists who work in this way engage with human relations and the social context (Bourriaud, 2002) and can become the catalyst that progresses personal and social transformations. This involves altering the perception of everyday practices and how they are conducted, to no longer be seen as just inconsequential aspects of daily living (De Certeau, 1984). Such artists work in the public realm of politics, social life and environment developing

understandings of *how to* work well with their communities by living with them and learning from them: joining-in the web of ‘group life’ (Harper, 1987). Here, good listening skills are important (Corradi Fiumara, 1995) to ensure that the voices of others have been heard, particularly the quieter more reticent members of the community. Such listening practices aid the admission and disclosure of complex societal issues from the insider’s perspective and may generate a sense of empowerment in those who are listened to. Through this process, a recognition of Self emerges that is intertwined with the Other, acknowledging interconnectedness, dependence and interdependence.¹ It is at this juncture also, with growing awareness of the complex position they hold, that the artist’s **certainty and vision, identity, language and ego** begin to erode allowing those practiced modes to evolve into new capacities to **listen, discuss, reflect and engage**. This happens as they develop understanding of the need for communication methods that can capture the complexities of lived experience, through the delivery of *performative actions*, rather than *representations* or *interpretations*.

This thesis aims to show that a specific set of knowledges accumulated through lived experience can be deployed in such a way as to improve the means by which ecological and social regeneration are achieved. My research explores how the role and value of embodied knowledge in a marginal community in the Outer Hebrides can be presented as the information underpinning a method to engage such communities. This was guided by a creative artistic strategy that was developed and practised with the people of Uist,² local organisations and national

¹ See Smith, B. R., Morphy, F. (2007) The Social Effects of Native Title: Recognition, Translation, Coexistence. Chap 11. Barcham, M. *The limits of recognition* pp 203-214 ANU Press <https://www.jstor.org/stable/j.ctt24hd8k.15> [Accessed 11.02.20]
 McNay, L. (2008) *The Trouble with Recognition: Subjectivity, Suffering, and Agency* Sociological Theory, Vol. 26, No. 3, pp271-296 American Sociological Association
<https://www.jstor.org/stable/20453110> [Accessed 11.02.20]

² The group of inhabited islands to the south of Lewis and Harris known as Uist, comprise of a chain of islands including Berneray, North Uist, Benbecula, South Uist. Collectively these islands are known as the Outer Hebrides.

partners in an open learning environment about how to develop eco-social regeneration³ in a small, rural community.

This thesis will address 3 specific questions. Firstly - How can co-creative artistic approaches help to develop strategic promotion of eco-social sustainability? To answer this, I will explore the agency of ecological and social embeddedness, and how this can help to develop the practice and identity of environmental artists who work in community settings.

Secondly - How can this knowledge be deployed for the benefit of the community and organisations concerned with climate change? Here, it will be necessary to show through project design and activity, the value that 'island communities' embodied knowledge' can add to the legacy of community projects addressing climate change. I define this knowledge as a specific set of knowledges⁴ accumulated through lived experience, as well as intergenerational and heritable knowledges, developed through the microcosm of geographically defined and contained communities.

Thirdly - How can a community's embodied knowledge contribute to generating an environmentally sustainable future? To answer this, I will look at how ecologically and socially oriented organisations engage with their communities. This research considers the performative and participatory elements of practices that involve others (communities, as well as policy makers, community organisations, national bodies) in discourse and activity on eco-social sustainability matters.

³ *Eco-social Regeneration* is a term for describing the joint aims of ecological regeneration and social justice through the means of designing projects that are good for all parties involved, both human and non-human. To be successful these projects need to develop significant transformation of the ways that people think, the ways that they act according to their feelings, and the ways they organise and deliver social justice. <https://gaiauniversity.org/ecosocial-design/> [Accessed 23.03.19]

⁴ I use the plural 'knowledges' to preserve and draw attention to the diverse and specific expertise held by different communities that arises through connection to each particular place. This is especially important to avoid misleading a reader into thinking that there is a homogenous flattening in a 'community' that translates into one way of doing things.

1.2 Island-based Community Embodied Knowledge

As a long-term resident of Uist, I both know and am known by my community. Without this social embeddedness, I could not have undertaken the sort of research I do, which relies on mutual trust and understanding, as well as a familiarity with the way that individuals and society works at a local level. It is a community that is interconnected across several planes of knowledge. Allied to the land, sea, seasons and with strong intergenerational and societal bonds, the inhabitants exhibit a broad skills base extending across several identities; and, with shared lifeworld beliefs people continue to pass knowledge on intergenerationally. As an environmental artist engaged in close community working, I want to understand and develop how this arts approach can be used strategically, at this time of climate crisis, to promote eco-social regeneration in small island communities. Through the process of research and practice, I have come to understand that this is done best by working with the community's own embodied knowledge, and I aim to show the importance of collective, performed knowledge in the development of this project.

1.2.1 What is embodied knowledge?

This term describes how the body rather than the mind is the knowing subject. This is not just about motor skills but is related to human experience. Maurice Merleau-Ponty (1962), known for his research on phenomenology, recognised the ability of the body to do what was necessary without needing the individual subject to first visualise, or 'represent in the mind' all the actions that were required to carry out the action. In 1991, Varela, Thompson and Rosch published their examination of lived experience in *The Embodied Mind, Cognitive Science and Human Experience* that drew connections between phenomenology, science and Buddhism where both the environment and human experience are recognised as being interdependent.

Island-based community embodied knowledge extends all of this through accumulation of shared, lived experiences and relies upon an ability to move backwards and forwards from the perspective of one individual to the collective experience of many people within a community. It is important to

consider that regardless of how each encounter manifests, whether through physical presence, psychic disposition, contextual, cultural or political situatedness, each are inextricably connected; ‘diffractively threaded through and enfolded in the other.’ (Barad, *On Touching: The Alterity Within*, 2018, [8:54]).⁵

This complexity of connections between people extends also into the way we have engaged with matter and other non-human beings as productive measures to sustain our human existence. We are now beginning to acknowledge the damage industrialisation has caused to those materials and beings, and are becoming aware of phenomenological consequences that may lead to *existential risk*⁶ for our species. While not in itself a human extinction threat, climate change is becoming better understood as *human-induced* just as its effects in rising global temperatures, droughts, floods, extreme storms are becoming more ordinary occurrences. The havoc this causes, relating to food, water and housing shortages, trigger economic instability, migration, and other catastrophes. While these huge issues are clearly for governments and society to tackle globally, as artists, we can use these terrible times to engage with the damage we have caused through the method of ‘noticing’ the signals that may yet shift our senses to enable better responses to the situations we are now facing (Tsing, et al 2017 pM7).

1.3 Modus Operandi

During my time spent on Uist and based on my observations of behaviour, I have come to appreciate how, when faced with challenges, these practical, island-based people do not just sit back and wait for others to act, but instead use their lived experience and inherited bank of knowledges to make decisions about what to do, and then take action. Even so, the ‘new climatic regime’ (Latour, 2018) has

⁵ *On Touching: The Alterity Within*, Karen Barad [Studium Generale Rietveld Academic](https://www.youtube.com/watch?v=u7LvXswjEBY) Published on Jun 27, 2018 <https://www.youtube.com/watch?v=u7LvXswjEBY> [Accessed 10.05.19]

⁶ See Centre for the Study of Existential Risk, University of Cambridge <https://www.cser.ac.uk/> and *Martin Rees: Can we prevent the end of the world?* <https://www.youtube.com/watch?v=tMSU6k5-WXg> [Accessed 08.10.19]

caused the anthropocentric notion of nature to ‘malfunction’, and ‘we no longer know on what we depend for subsistence’ (p 86). At a local level, changes can be subtle whilst still ultimately catastrophic, as they creep into the everyday experience and become the new norm.⁷ Rural people are perhaps better placed to adapt to change yet share wider society’s lack of experience in understanding to what irrevocable changes they will have to adapt to. So it is here, in my opinion, where important reengagement opportunities lie for ecologically and socially motivated artists to unite with the practicable people, in their communities, to explore new knowledges, and share and resurrect old ones that collectively improve awareness of how to not only achieve local survivability, but also to flourish in these ecologically challenging times.

The implementation of this reengagement strategy requires the augmentation of a horizontal learning approach⁸ that can identify and uphold what is already known and practiced by local people, as the valuable but neglected information that can also come to benefit other communities, local organisations and national bodies. This approach affords the community a ‘teaching’ role, and insodoing reverses the more usual situation where local residents are perceived, (by organisations) as the ‘ones needing teaching’. This dominant organisational position of holding professional expertise can include community arts organisations too, understood as they are to ‘facilitate community-based learning and environmental enrichment’. I chose not to directly consult with these organisations because, based on my prior experience

⁷ The Lithuanian Pavilion at the Venice Biennale presents a ‘subtly unnerving performance about the laziness that leads to the end of the world.’ Halperin, J. (2019) *It’s Hard to Make Good Art about Climate Change. The Lithuanian Pavilion at the Venice Biennale is a Powerful Exception* Art Net News https://news.artnet.com/exhibitions/lithuanian-pavilion-1543168?utm_content=buffer92454&utm_medium=social&utm_source=facebook.com&utm_campaign=news&fbclid=IwAR2E866Sbo54VevbDakAwBIdxL_Ryhbe31YmdwD79PdaEFr7w0sCt4ZBy3U [Accessed 17.05.19]

⁸ ‘...horizontal learning is based on non-traded relations, organised through different mechanisms ... socially-embedded learning, labor mobility, interaction and ...collective invention.’ Bathelt, H. Cohendet, P. Henn, S. Simon, L. (Eds) (2017) ‘The Elgar Companion to Innovation and Knowledge Creation’. Chap 24 Li, P. *Horizontal learning* pp392-404 Edward Elgar Publishing Online <https://doi.org/10.4337/9781782548522.00033> [Accessed 11.02.20]

(as a one-time trustee and chairperson of a local arts organisation, and having taken part in numerous rurally located artist residencies, symposiums, and exhibitions), my perception was that they are often run with limited openness towards, and knowledge about, the local communities and environments in which they are situated. Instead, they benefit artists more, and those involved in other forms of ‘externally-driven’ cultural intervention, as demonstrated by the fact that they are mostly core-funded through government-controlled bodies. That is to say, they are for the most part, directed, led and peopled by professional individuals who are located ‘outside’ of the communities concerned, and at a distance from them.

From the perspective adopted in my thesis, such organisations are, at best, delivering piecemeal community ‘engagement’ events and ‘art’ activities for a contained, ‘ready-made’ audience, such as school children and people who (due to the mainly day-time programming of activities) either ‘can’t’, ‘don’t’, or ‘don’t anymore’ work. They also design programmes that mainly support (financially and professionally) visiting artists (over local practitioners) who carry identities of professional artistic merit. These approaches to community engagement have the effect of drawing audiences away from their bases and into publicly funded buildings, which in and of itself is not necessarily an adverse exercise. However, the kinds of activities and engagements offered to such audiences are often built around the ever-pressing requirements by funders for quantitative audience evidence trails, which can limit the creation of durational, meaningful and beneficial experiences. These actions and approaches can result in a situation where organisations fail to ‘meet’ the widely experienced public in their own contexts, positions and locations. At worst, these approaches demonstrate and uphold colonialist-like attitudes that convey ‘connotative dissonances’ (subtle barriers to rapport in communication) (Liassus, 1990) and resound with the message that local people need to be taught – even, and especially, about their own environments.

I contend that a more decolonial, ‘accompanying’ (Watkins, 2017) practice would value community embodied knowledge, and use it to engage communities on the environmental and climate change matters that will come to

affect them. This will be more readily received when essential social skills (such as affinity, deep listening, and trust building) are combined with artistic and citizen science methods,⁹ to underpin the design of engagement projects that really relate to and motivate people.¹⁰

those who accompany respond to invitations to come alongside others, to learn about and witness the situations that concern members of a community, to provide advocacy when desired, to co-create spaces to develop critical inquiry, radical imagination, and participatory research, and to respond to expressed needs... honoring the knowledge, experience and desires of community members. (Watkins, 2017)

This approach foregrounds projects that focus on challenging social and environmental decline to find the means to build more liveable futures that facilitate long-term social regeneration whilst improving ecological sustainability in small communities (Smith, 2007). Through these engagements, participants develop ‘eco-social response-ability’ (Haraway, 2016) and come to better comprehend how the human and nonhuman are inextricably linked, understanding the value of togetherness and ‘sympoiesis’- a making-with practice.

1.4 Art as Catalyst

At this time of global warming, which Amitav Ghosh identifies as a ‘collective predicament’ that we no longer have the practical skills to address: ‘it is as if the

⁹ Ecology specifically focuses on how organisms relate to one another and to their surroundings. Eco-systems are changing all the time due to natural fluctuations and to the influence of human activity on these systems. Ecologists study these changes using 3 methods – observation, modelling and experimentation, but are becoming increasingly aware that they cannot do all the observational work required. They are turning to Citizen science as a tool to develop research through metadata, but also as a means of benefitting public engagement. See Dickerson, J. L. et al. *The current state of citizen science as a tool for ecological research and public engagement* <https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1890/110236> [Accessed online 04.04.19]

¹⁰ Cathy Fitzgerald *Developing an effective eco-social art practice* <https://www.slideshare.net/cathyart/developing-an-effective-ecosocial-art-practice> [Accessed online 02.04.19]

gas has run out on a generation accustomed to jet skis, leaving them with the task of reinventing sails and oars' (Ghosh 2017 p81): I wish to activate and expand on how social mediation, community building, and culture can develop by increasing awareness of the type of arts approach that de-emphasises the exclusivity of art in favour of 'ensemble practices' (Biggs 2019).¹¹ An *ensemble* denotes a harmonising or complementary group that comes together to form a single effect, emphasising the roles of all performers as a whole rather than focusing on the individuated 'star' performer. Where artists join in with emplaced communities, their ways of seeing and making through eco-social approaches become hybridised. In contemplating, discussing and taking action on uncertain, effecting elements such as climate change, I am able to draw on and develop new praxes that encourage reflexive reassessment that works with communities' existing materials, methods and processes, and can help to shift community thinking from being reliant to being more response-able.

People's perception levels and awareness can vary widely, but to introduce a shift in our cultural values a good relationship needs to develop first, and I feel that is best done through a collaborative process that respects existing knowledges and hierarchies. This information is not at odds with a society who are dependent on the environment for their livelihoods but the way this information is introduced needs sensitive handling in order to be considered rather than rejected. My research, explored how the role and value of community embodied knowledge could be presented in such a way as to engage members of communities in processes of behavioural change that lead towards ecological and social regeneration. The aim of the project was to shift the behaviours of Others, but to achieve that, I think it helps to have experience of a shift in your own thinking/behaviour first. Particularly to have experience of the displacement that happens in this process where you 'step outside of yourself' to become an observer of your own practices – and come to see what needs to change.

¹¹ Biggs, I (2019) In preparation. (Routledge Companion to Art in the Public Realm)

My personal experience of transforming my artistic focus from an environmental to a more socially directed art practice happened while completing work for the Master of Fine Arts *Art, Society, Publics*¹² in 2014, subsequently leading onto ideas for this PhD. *Land Radius, 2014*¹³ was a durational video work that captured the annual emergence of Sea Pinks (*Armeria Maritima*) on a salt marsh near my home in North Uist. This was a phenomenon I had witnessed taking place each June for around 25 years. The fact that these delicate flowers could exist at all in such a challenging location fascinated me, but also visually transformed this otherwise unremarkable piece of apparently ‘valueless’ land. I settled on the idea of using a trail camera that could sit in the landscape for as



Figure 1-1 *Land Radius, 2014*, sculpture/video site, North Uist

¹² *Art, Society, Publics* was a Masters of Fine Art programme run by Duncan of Jordanstone College of Art and Design at University of Dundee from 2014–2018. This course developed practice through study of the interrelationships between art (production and the artists role), society (current societal issues) and publics (diverse audiences).

¹³ *Land Radius, 2014* comprised of a 9-hour video centred around 60 days of activity on a small piece of a salt marsh on North Uist: edge lands hosting subtle and extraordinary colonies, each taking turns to ‘raid’ the land. Species such as *Armeria Maritima* (Sea Pinks), red deer, geese, otters, herons and gulls, and the surge of the tide as it overwhelms the land at each new moon. It was accompanied by *Land Radius Fugue: Transcript of Dialogues* in printed book form. These actions are narrated through human eyes, told by crofters, seafarers and scientists of experience and frustration at the unchecked increase in deer numbers, protected status for marauding geese, and the pull of gravity and lunar cycles on this tiny patch of land.

long as necessary to capture the process. Additionally, from their tracks, I knew that deer frequented this area and that they would potentially come to feature in the video too. Another element present in the salt marsh was water, and the fact that the land got flooded by the adjacent sea loch. I sought to capture the effect of this by anchoring a 10-meter diameter ring of blue water pipe in the centre of the frame that would start to float as the tide came in each day.

The camera was set to record 1min-long video sequences at several fixed times a day, and a motion sensor would activate recording of any additional activity throughout the 2-month duration. As expected, the sea pinks emerged giving a spectacular show. The deer presence turned out to be much greater than I had expected and charmingly animated the scenes along with other species who were picked up by the camera's sensor, such as geese and otters. The land, however, only ever flooded on two occasions in this period of filming. I didn't understand why this was and was disappointed. Yet, this was also the moment when my real engagement began.

I had taken it for granted that I knew what happened each day, but I now started to question my own assumptions, and realised that there was clearly something else going on that I knew very little about. I went on to have discussions with many people who could tell me more about the occurrences happening here on this tiny piece of common land. I spoke with crofters about



Figure 1-2 Land Radius, 2014 (video still)

the impact of the deer numbers, and also about the heritage of land stewardship; bird wardens could explain about the rising geese numbers and the need for culling; I asked a physics teacher to tell me about the tides and the moon but learned instead about gravity. In the end, however, it was a ferryman who could best explain to me why the land only flooded once a month. He spoke about the sea in a way I had never heard before. He described how the shape of the land affected the height of the tide and the currents. And how vast seas were moved by gravity and lunar cycles. His ability to convey his physical understanding was extraordinary to experience, yet it came from his ordinary, daily lived, physical knowledge of working on that body of water.

I had experienced a private revelation into the value of this microcosm from which to *observe and question* how best to bring out and feature this local knowledge that was so vital to the community. This form of knowledge is relational and a very different kind to that of the physics teacher. It resides intangibly in relation to Others. It is interactive and entangled within the giant, living, breathing whole. Science artificially separates out aspects and studies, measures and authenticates them, in an effort to explain and understand the world. But the more tacit, nondiscursive, silent knowledge such as that of the ferryman is used for the access it provides for his livelihood. He *knows* through what he *can do* and how he *can act* relationally within the whole.



Figure 1-3 Land Radius, 2014 (video still)

And so it was this recognition that there was more going on than I had thought, which led onto ideas for the PhD as a way to explore possibilities for showing the importance of island people's knowledges, and then using those knowledges as a way to engage communities in understanding how climate change will come to impact on their lives. Although I am a trained artist rather than a community worker, I took on the role as project leader for the local Climate Challenge Fund Project *Local Food for Local People* because I saw the potential to work with the community in a way that would bring a creative, performative approach to a subject that is difficult for society to engage with. There was an added benefit in that I would have a generous project budget to work with. This is an unusual position for an artist, to have access to sufficient funds with which to develop ambitious plans that enable them to execute their ideas. However, I did not really know if I would succeed in all of my aims. It is hard to tell people that they need to take on more responsibilities, especially about matters that even global leaders were reluctant to align themselves to at the time. And also, who was I to be talking to anyone about climate change – I wasn't a scientist but an artist after all? I wasn't even local. What did I know about it? Where was my motivation coming from? Who was encouraging me? What was the catch? These are some of the propositions I encountered. Yet, I stood fast and held my position as an eco-social artist using performative and participatory elements of practices to lead others in discourse and activity on environmental and social regeneration. My hopes for this new approach to community engagement would leave participants not only more aware of the challenges that climate change poses, but also more prepared to adapt to the challenges through having understood that the changes they could make would be linked to their pre-existing lived, physical knowledge.

1.4.1 Understanding Mutuality

I work as an artist to understand mutuality, like-mindedness, or kinship, through an artform that is concerned with developing actions that engage with environment, human interactions and the social context. This process of *performativity* acts in spaces of the everyday to deliver transformative 'doings'

(activities, actions, events, responsibilities, deeds, undertakings, accomplishments, feats) following verbal and non-verbal negotiations within the personal, social and political realm of the individual and the collective — in place. The idea of *place* incorporates concepts of identity and community, dominion and control, land sites and knowledges linked to activity and experience. *Place*, as a human construct, can perhaps be more usefully thought of in terms of *territory*. With this term in mind, I developed my performative and participatory position ‘within’ the community as though an outsider entering another’s territory, equipped with heterogeneous visual and productive skills founded in broad environmental experience. However, my dual position as *inhabitant* obfuscated that outsider’s position, amplifying my ability to connect with communities through my *co-experience*¹⁴ of their common issues and concerns. Moreover, as an educated listener, I was able to translate important climate change awareness, such as how human activity and dependence on fossil fuels is changing the climate and natural systems that the community relies on for continued existence. Working from this more inclusive, interconnected perspective we developed collective understanding of the *need for*, and *how to* change the ways we were living to more sustainable or regenerative models.

I produce interactive multi-media artworks that record and disseminate the embodied knowledge of a specific community, through a myriad of acts (deeds) and actions (done to accomplish a purpose) generated by that community. These works, such as represented through *Meeting Ground Exhibition* (Thesis Vol 1, Chapter 1), affords a way for the community to come to see themselves and the lived performative acts they have instigated themselves, as transformative actions. While it is possible that these can be viewed by others as evidence towards a ‘repeatable model’ the essential purpose of these works is to

¹⁴ *Co-experience* is a term used by user-centred designers to denote ‘user experiences’ in social interaction, offering a ‘holistic approach to understanding the relationship between the user and product, and the experiences that result from their interaction’. See Battarbee, K. (2004) *Co-Experience: Understanding User Experience in Social Interaction* <https://aaltodoc.aalto.fi/bitstream/handle/123456789/11462/isbn9515581613.pdf?sequence=1> [Accessed 10.02.20]

show the community to themselves in a way that they are not normally seen publicly (in an art gallery exhibition), in their place, and through acts of their own creation. To make this work as widely accessible as possible, the particular chosen aesthetic employs a familiar ‘social media mode’ of videoing – ‘caught in the moment’ action with scant regard for composition, picture or sound quality, or story building – in an effort to *show* as clearly as possible the *acts* achieved as they take place, and the *persons* involved in their execution. It is important not to mis-read these video presentations as artworks in and of themselves but as part of a whole transferable language that communicates the complexities of experience intrinsic to each specific community. These visual communications should also not be viewed as representations of excellence (in either visual presentation or horticultural achievements) but as testaments, in an accessible visual form, to each community groups’ agency in taking action together, on their own terms, in charge of their own legacy, and in the context of their own territories: that is, within the terms of their identity, community, dominion, control, land, knowledge, activity, and experience.

1.5 Approach to Enquiry

In wanting to define a praxical role for this complex artform, I needed first to disentangle some of the interrelated aspects of environmental, societal and art-based practices I have grappled with throughout the research process. I eventually teased out eight separate strands of enquiry that identified, scrutinised and questioned the strategies that artists negotiate while working in community settings to develop behavioural change activities. These strands are grouped in chapters (as indicated), and take the following positions:

- | | |
|---------------------|---|
| Ch. 2 (Lit. Review) | Strand 1: Eco-social art practice as a praxis to engage communities |
| | Strand 2: Art Practice as Research |
| | Strand 3: Process of intergenerational knowledge transfer and why embodied knowledge should be valued |
| Ch. 3 (Methodology) | Strand 4: Design of study and research methods |

	Strand 5: Process of approaching ethical concerns raised through working in community-based practice
Ch. 4 (Empirical)	Strand 6: How can co-creative artistic approaches help to develop strategic promotion of eco-social sustainability?
Ch. 5 (Empirical)	Strand 7: How can this knowledge be deployed for the benefit of community organisations concerned with climate change?
Ch. 6 (Empirical)	Strand 8: How can a community's embodied knowledge contribute to creating an environmentally sustainable future?

1.5.1 Chapter Outline

An extended review of current features of ecological and social art practice is given in Chapter 2, inflected by the ideas and work of writers and practitioners who recognise the importance of eco-social art approaches. The value of embodied knowledge is considered, with its links to guardianship of the land and the ways in which it may promote living a more creative life,¹⁵ in more resilient communities. Here I set out how this type of art practice arguably provides a deeper understanding of the need for ecological and social sustainability and, in the absence of a guiding theory, describe how artists can contribute perspectives on facilitating eco-social change.

In Chapter 3 the methodologies developed for this project are described. These diverse practices have involved establishing co-creative programmes for community involvement framed by creative practices. To frame this method, the terms of 'co-creative' participation are defined. Layers of place-based historical, cultural and visual information are gathered into new narrative or visual formats for educational purposes in a method of deep-mapping. Consultation exercises with individuals and focus groups are undertaken to

¹⁵ Jeanne van Heeswijk: 'Living as a creator rather than consumer' http://www.jeanneworks.net/essays/art_and_social_change%3A_learning_collectively_to_take_responsibility/ [Accessed 25.10.2018]

record personal responses to a series of project outputs, and surveys and case studies capturing data on changing attitudes and behaviours towards climate change issues are detailed. This chapter includes an extended discussion on ethical practice, particularly where interactions expose explicit and implicit knowledges linked to ethical domains, which can be key to shifting mindsets. These areas of personal community interactions require good judgement decisions for which artists are not often trained. The potential for dilemmas which can arise from these encounters will be explored in this section.

In Chapter 4, I set out how my working life on Uist for over thirty years, as a horticulturalist, artist and researcher, and my feelings of ‘belonging’ and ‘being known’ by my community have motivated and informed my ability to carry out this research project. I describe how this sustained experience has contributed to my practice and identity as an environmental artist working with the embodied knowledge of the community. I explain how I have developed the interpretive and participatory elements of my post-studio practice so that I can engage more effectively with the human and non-human community that surrounds me.

Knowledge about environmental sustainability can be lost with the ever-increasing modernisation of isolated rural communities. On these islands an increased dependence upon technology, changed occupations, and the derogatory devaluing of local practical knowledge has led to some communities becoming disassociated from their rural environment, along with other intensified contemporary social, economic and ecological challenges. Chapter 5 conveys how this research project sought to mediate this loss by using art to strategically promote eco-social regeneration. It did this by collecting and channelling practical and theoretical engagements that rekindled old tacit knowledges and skills to help communities reimagine their places. The main research and activity of these projects, funded through the Scottish Government’s Climate Challenge Fund (CCF), were sited at several locations on the southern Hebridean islands of the Uists.

These projects set out to stimulate eco-social intra-actions across communities to tackle contemporary loss of connection to environment, and

introduce practical ways to reengage, in this instance, through local food growing initiatives. These comprised of a series of three one-year projects from 2015-2018 that developed local food growing potential through provision of allotments, horticultural advice and training, and mentorship support for the 'growing community'. The projects were designed through a process of planned actions, shared vision, co-intelligence and co-management strategies. They rekindled understanding of the importance of traditional and social community practices such as 'working together' and 'making use of local resources'. As a cultural starting point the projects acknowledged the relationship that exists between humanity and the environment, whilst also developing community carbon literacy skills as a contribution towards a more regenerative future. These endeavours introduced key ideas about the potential for co-creative artistic practices to assist in the transition of society to a more creative form of daily life that is sensitive to the threat of climate change.

During my studies, I came to understand something of the cultural disparities between the Western approaches to knowledge when compared with indigenous societies. These reveal very different world view perspectives that display a culture of interconnectedness across human and non-human realms. My research journey led me to undertake a period of research in Aotearoa/New Zealand, where I carried out comparative research to gain perspective on the role indigenous communities with long standing, interconnected relationships with their natural environment can play in reversing this trend of devalued practical knowledge (Te Kanawa, 2012). Together with the limits related to the transference of such a model, this part of the research focused on regenerative environmental practices¹⁶ to show how these can influence governance of resources and develop flourishing communities. I collaborated as artist-in-residence with the Auckland-based Kaipātiki Project¹⁷ who work closely with a

¹⁶ Savory Institute Ruminations Newsletter (2019) *Regenerative vs sustainable agriculture: What's the difference?* 'The intention to regenerate or renew the productivity and growth potential of what is being renewed' <https://www.savory.global/regenerative-agriculture-sustainable-agriculture-differences-holistic-management/> [Accessed 24.08.19]

¹⁷ Kaipātiki Project Environment Centre <http://kaipatiki.org.nz/>

broad cross-section of the local community - including volunteer groups, local schools, local residents, and other local environmental organisations - to teach regenerative environmental practices. Chapter 6 outlines this experience, assesses the capacity of this organisation to promote interconnectedness across the whole ecosystem, and describes the role that creative strategies can play in harnessing the community's embodied knowledge to reconnect community with place.

In Chapter 7, I review the structure of my practice, which consists of artistic ideas, methods and theories involved in understanding and interpreting a community's actions. I also reflect on the way the projects that I have worked on reveal how communities that are connected to their surroundings are able to co-create meaningful futures, which enhance the sustainability of both the environment and its inhabitants. The separate aspects of this research will be resynthesised in a visual art exhibition that conveys the methods used to foster new understandings of valuing and reintroducing traditional community practices that allow for regenerative, co-creative action.

Chapter 8 will conclude my thesis, which set out to show how eco-social, artistic strategies can be used to nurture new understandings of traditional community values and practices as a method to engage communities to take action in response to climate change impacts.

Chapter 2: Literature Review

Eco-social art offers up new ways to apprehend life-sustaining actions by establishing and recovering principles and practices, and future orientations relevant to caring for isolated places and their human and non-human communities. This chapter presents a review of relevant literature and related discussions with artists that identify key ideas and new forms of expression that have developed my understanding on the significance of ecologically and socially focused art. These have been guided by how I think such practices can be of benefit to geographically defined and contained communities, like those on the islands of Uist, by crystalising a different perspective and subjectivity to develop ways of making visible and more widely accessible community knowledge on local survivability.

It is presented in three strands, the first of which introduces the role that art plays with regard to critical thinking and how it can raise awareness on a range of issues that can strategically promote eco-social regeneration, if facilitated through dialogic engagements embraced by a listening paradigm. Here, the value of community embodied knowledge is considered, with its links to guardianship of the land and the ways in which it may be developed to promote living a more creative life, in more resilient communities.

2.1 Strand 1: Eco-social art practice as a praxis¹⁸ to engage communities

A life in art demands a kind of devotion, or allegiance to the part of our nature which is kept out of sight: the softer parts, where our being holds capacity for

¹⁸ The term *praxis* is used here following the explanation given in Elkins, J. (2012) *What do artists know?* The Stone Art Theory Institute: Volume Three. Penn State University Press, US. In Chapter 5, 'Artistic Knowledge, Part 2', p49, Areti Adamopoulou writes '*praxis* (which today means action) ... originally meant to go through, to cross and, later, to act.'

beauty, pity and pain. Perhaps these capacities are insufficient to counterbalance the enormous ecological and social problems we are now encountering. Maybe art can seem too invisible an influence on everyday life. Even so, involvement in art is about developing critical thinking and finding ways to connect with others by gaining the flexibility to look at things from all sides, absorbing different points of view and in doing so develop other ways of seeing, thinking and acting that nourish our empathic humanity and reconnection to the potential within ourselves.

The particular skills that enable artists to develop such perspectives are set out by Frances Whitehead in her statement *What do Artists Know*.¹⁹ Here, she lists the diverse agilities of artists to make connections across intellectual, practical and material fields. These respond to problems, propose solutions, initiate and re-direct focus, evaluate meanings and accountability to produce visualisations that lead to the creation of new knowledges. But how can these skills be employed to help society transform its perspective?²⁰ Artists' knowledge of materials, material culture, and the way in which 'things' signify are important perspectives they can use to help communities engage with and relate to environment. But, as Whitehead concedes, 'artists are not always team-oriented or willing to compromise', recognising that in collective situations, artists often want to maintain ownership of their personal investment as 'vision holders', and can find it hard to relinquish some of the control over their ideas.

The term 'vision holder' describes the one who holds a picture in their mind, ensuring continued focus on the imagined destination to guide the journey. If this vision has been derived through a collective envisioning process, perhaps led by the artist, it can act like a 'shared-values compass', where the artist can confidently assume the navigating role, as the one who ensures that the collectively desired outcome is reached. But if the vision is the artist's own

¹⁹ Whitehead, F. (2006) *What do Artists Know* The Embedded Artist Project http://embeddedartistproject.com/What_do_artists_know.pdf [01.05.19]

²⁰ Mezirow, J. (1978) *Perspective Transformation* Adult Education Volume: 28 issue: 2, page(s): 100-110 <https://doi.org/10.1177/074171367802800202> [Accessed 15.05.19]

independently defined goal, however valid, the people who support and mobilise around this goal will only ever be subordinate to, rather than full beneficiaries of, the outcome: assistant rather than co-creator. We all have our own independent criteria for valuing and taking action, but to safeguard that the former scenario prevails, artists need to find ways to engage communities and institutions with the aim of transforming perspectives towards collective visions that are more 'inclusive, discriminating and integrative of experience' (Mezirow 1978).

When compared with the urban situation, communities such as the one in Uist, with a population of predominantly island-born, rurally located residents, display a very different lived experience. Their lifeworld is underpinned by dependence on the environment, and they rely on their 'shared community of practice' (Pyrko I, Dörfler V, Eden C, 2017) to make full use of the biosphere for their livelihoods, habitation, and continuity of population. While this skill set is not normally something recognised as 'expertise' outside of the community environs, this accumulation of embodied knowledge ('know why, know when or where, and know who')(Elkins, *What do Artists Know?*, 2012), and experience of adaptability, is important because it can not only continue to sustain the community's existence during this era of impactful climate change, but also has the potential to inform and help guide others in understanding how to act similarly. Also, at this crucial juncture, when modern society is becoming more conscious of our disconnectedness from the natural world,²¹ artists working in the eco-social field can bring to the fore appreciation of 'humanity's innate affinity with nature' (Wilson, 1984). The more we come to understand other organisms and value them, the more we will value each other and ourselves.

²¹ Andersen, R. (2015) *Nature has Lost its Meaning: to solve climate change, we need to reimagine our entire relationship to the nonhuman world* SCIENCE
<https://www.theatlantic.com/science/archive/2015/11/nature-has-lost-its-meaning/417918/> [Accessed 16.04.19]

2.1.1 Presence in Everyday Experience

The bodily experience of ‘being in place’ is underpinned by a physically enacted *presence*. *Presence*, is related to a conception of the Self, which Triberti and Riva (*Being Present in Action: A Theoretical Model About the “Interlocking” Between Intentions and Environmental Affordances*, 2016) consider to be the dynamic ability to act and adapt according to the environment in which one is situated.²² Their research stems from early studies into Virtual Reality²³ that sought to understand how participants could feel present in ‘computer-simulated environments’. *Presence*, they contend, is composed of three sub-processes: *proto-sense* is co-constituted by the body through proprioception and motor control, and distinguishes the Self from the external environment; *core presence*, is the felt sense of environmental experience achieved through engagement and action, and each corresponding response; and finally, *extended presence*, confirms to the Self, at an intellectual and emotional level that the actions undertaken were effective, which leads into knowledge building within the bodily environs.

These aspects of ‘felt presence’ are vital to our understanding of *embodied knowledge*, where the body rather than the mind is the knowing subject. Ordinary everyday actions do not require us to consciously think, but allow us to move, almost spontaneously, according to the perceptible affordances (properties that suggest possible uses) provided by the object or situation. However, although we may not be aware of it, bodily movement is aligned to the intent underpinning the behaviour: ‘Intention can be considered the desire to effect change on our environment’ (Schwartz, *Movement: How the Brain Communicates with the World*, 2016). Therefore, *embodied knowledge* is not just about motor skills, but

²² Triberti and Riva consider that the cognitive state of *presence* plays a key role in linking perception and intention, and is located within the Self as a dynamic ability to act and adapt according to the environment in which it is situated. Triberti, S., & Riva, G. (2016) *Being Present in Action: A Theoretical Model About the “Interlocking” Between Intentions and Environmental Affordances*. *Frontiers in psychology*, 6, 2052. doi:10.3389/fpsyg.2015.02052 <https://www.frontiersin.org/articles/10.3389/fpsyg.2015.02052/full> [Accessed 16.05.19]

²³ *Virtual Reality* describes the computer-generated simulation of a 3-dimensional image or environment that can be interacted with by a person using special electronic equipment <https://whatis.techtarget.com/definition/virtual-reality> [Accessed 08.10.19]

includes gradually acquired collective human experiences, which are meaningful interpretations of events observed in the conscious human mind.

The living body enacts the world it lives in, meaning that embodied action creates its own experience in the world that constitutes its perception and thereby grounds its cognition. The body has abilities to do what is necessary without first having to visualise, or ‘represent in the mind’ all the actions that are required to carry out the action. Maurice Merleau-Ponty, in *Phenomenology of Perception* (1962) explains this as ‘bodily memory’. The body bends towards the action before the mind has thought again about how it will do it. This knowledge is not explicit, conscious, or easy to articulate, but pre-reflective self-consciousness, the ‘point of convergence of action and perception’ (Legrand 2017),²⁴ provokes a feeling of being ‘at home’ in the body that enables the required action to proceed without brain-based thought. It is a passive knowledge that remains in the *doing body* - the hands, feet, neck, back, and so on - and is demonstrated when bodily effort is made known by or through the body when it is practiced (Merleau-Ponty, 1962, p114). Merleau-Ponty argues that the experiential foundation of this immersion in the world is one part of *perception*. ‘Perception is the immediate givenness of the world founded in corporeal sensibility’ (1962, p58). It comes through a lived relationship between an intentional but pre-reflective body and the external world it encounters and perceives.

In 1991, Varela, Thompson and Rosch published their examination of ‘lived experience’ in *The Embodied Mind, Cognitive Science and Human Experience*. Their research drew connections between phenomenology, science and Buddhism, recognising the interdependency between both the environment and human experience. They presented cognition as an *enacted* rather than a

²⁴ Legrand, D. (2006) *The bodily self: The sensori-motor roots of pre-reflective self-consciousness* Phenomenology and the Cognitive Sciences (2006) 5: 89–118. Springer
https://www.researchgate.net/profile/Dorothee_Legrand/publication/227257723_The_Bodily_Self_The_Sensori-Motor_Roots_of_Pre-Reflective_Self-Consciousness/links/00b7d51d1ff1815885000000.pdf [Accessed 26.04.19]

representational structure, which means that the mental process of acquiring knowledge and understanding is physically linked to the experience of environment through bodily sensorimotor capacities and does not happen independently of that coupling. Relevant knowledge acquisition is dependent upon the agency of the whole body to act; a body, which they consider as an ‘adaptive autonomous and sense-making system’ (1991, p xxvi) that consciously reacts and readjusts in ‘continuous self-modification’²⁵ according to the experienced conditions: ‘cognition and world are interdependently originated via the living body’ (1991, p xxvi).

Community Embodied Knowledge is best seen as the collective extension of this process through accumulated, and shared, lived experience. It exists where people know each other through familial and experiential ties; are attached to their place/environment/land; and, utilise knowledge that has been passed down through generations to understand and progress their own existence. This practical, intergenerational knowledge also has a moral or ethical component, which Aristotle termed *phronesis*: ‘practical wisdom is less a capacity to apply rules than an ability to see situations correctly’ (Crisp, R., 2000, p xxiv). *Phronesis*, therefore, is a form of situationally informed practical reasoning that includes the individual and collective ability to make good choices, based on prior shared learning about what is the right thing to do in the circumstances.²⁶ So, thinking about the important role that embodied knowledge plays in moving us to act might help get us to fundamentally different ways of living than that of recent decades which has had such a destructive consequence in leading us to the current climatic upheaval. This enacting of experiential knowledge is core to my work, and this project relies upon the ability to move backwards and forwards

²⁵ Thompson, E. (2017) *The Enactive Approach* The Brains Blog
<http://philosophyofbrains.com/2017/01/27/the-enactive-approach.aspx> [Accessed 11.10.19]

²⁶ For discussion on this see: Breier, M, and Ralphs, A. (2009) *In Search of Phronesis: Recognizing Practical Wisdom in the Recognition (Assessment) of Prior Learning*. British Journal of Sociology of Education, vol. 30, no. 4, pp. 479–493. JSTOR
www.jstor.org/stable/40375445 [Accessed 14.04.19]

from the perspective of one individual to the collective experience of many people within a community.

During my time spent on Uist and based upon my observations, I have come to appreciate how peoples' behaviours are influenced by their surroundings. When faced with challenges, these practical, island-based people do not just sit back and wait for others to act, but instead use their lived experience and inherited 'bank of knowledges' to make decisions about what to do, and then take action. This was all too apparent following an extreme weather episode in 2005 on the islands of Uist when a hurricane devastated the islands leaving three generations of one family dead,²⁷ as I will now describe here in detail.

It was extraordinary enough to endure the relentless pounding of our property over the 16-hour long event, but to emerge the following morning into the sunlight and survey the damage that we and our fellow township residents had sustained, was a sobering experience. This shocked response was transcended, however, by the information that a family was missing, and a call was made for all who could to join the search. The islands infrastructure was wrecked – roads, bridges, phonelines, electricity cables, fences, windows, doors, caravans, buses, cars. Gable ends of stone houses had fallen in. Even parts of the land no longer existed after they had been washed into the sea. Sheep and unknown numbers of wildlife were drowned, and then - as we would discover – so too had precious human lives. The disruption to life was universal, and brutal: the impact on our fleshy selves, palpable. Who would clear things up and get us back to 'normal'? Only ourselves: the inhabitants. Engaged in the 'practice of community': working together, carefully supporting, clearing, cleaning, fixing; recounting our separate but comparable experiences in hushed tones, thankful for being spared. We were all changed, awakened to vulnerability as never before.

²⁷ Ross, P. (2015) *Tragedy on South Uist: the storm that swept a family away*. The Guardian <https://www.theguardian.com/lifeandstyle/2015/oct/10/south-uist-storm-tragedy-10-years-on-peter-ross> [Accessed 16.04.19]

2.1.2 Environmental Context

The recognition of a non-human presence holding sway over human lives is something with which island communities are familiar, and this was thankfully a rare event, and will be remembered as such. But even so, other environmental changes can be subtle and have the potential to be ultimately catastrophic, as they creep into the everyday experience and become the new norm. These kinds of changes include sea level rise, coastal erosion, rising temperatures, and more frequent weather events.

The potential impact of sea level rise on Uist was outlined in a report from Scottish Natural Heritage (Angus, 2014).²⁸ Winter water tables in Uist are already high, and a high proportion of the area is permanent open water and marsh – which means that the ground is already saturated and cannot absorb any extra water. This will have an impact on the special status of Uists habitat for conservation value as a range of species will be affected by the flooding caused by rising sea level. The aging condition of the drainage network throughout the



Figure 2-1 From Rueval, Isle of Benbecula: Storm clouds clearing

²⁸ Angus S. (2014) *The implications of climate change for coastal habitats in the Uists, Outer Hebrides* Ocean and Coastal Management 94 (2014) pp38-43 Science Direct, Elsevier Ltd. <https://www.sciencedirect.com/science/article/pii/S0964569114000490#> [Accessed 14.03.19]

Uists means that they will no longer be effective in transporting extra water away from flooded areas and pose a significant risk to the water table becoming salinised, which will affect wildlife habitats, species and crofting.

A more recent report in 2017 from the Scottish Government, as reported in *The Herald*,²⁹ warned about climate-driven coastal erosion that will affect further erosion of the low-lying coastline known as *Machair*, comprised mostly of shell sand and used for arable production found predominantly in Uist, Barra (Outer Hebrides) and Tìree (Inner Hebrides). It is described by Scottish Natural Heritage as ‘one of Scotland’s most remarkable living landscapes, where people manage the land in a way that encourages wildlife’.³⁰ The islands’ infrastructure, including buildings and roads along coastal edges, airport runways, golf courses, and archaeological sites will all be permanently affected by changing and more extreme weather patterns

The same report highlighted the effect of rising temperatures on land and sea for crofting and fish farming, through the spread of livestock diseases, including foot and mouth, blue tongue and liver fluke, and an increase in disease in farmed salmon stocks. Drier summers will affect crop production, and with warmer winters a projected 30% increase in winter rain will affect already saturated grazing. As weather becomes more extreme and prone to disruptive weather events, this will have an impact on off-island travel, causing delays and cancellation of sea journeys, and potentially affect the regular delivery of food and fuel supplies. Adaptation to these changes slowly occurs, but the costs of these impacts may not be fully counted until life has become untenable for non-crofting and non-fishing members of the community, causing the population to diminish and services to falter that will ultimately affect the whole population, and given the symbiotic status of *machair* development, this includes wildlife too.

²⁹ The Herald [online 27 August 2017] *Revealed: Climate Change and the terrifying risk to Scotland* <https://www.heraldsotland.com/news/15497924.revealed-climate-change-and-the-terrifying-risk-to-scotland/> [Accessed 14.03.19]

³⁰ Scottish Natural Heritage: Notes about Machair <https://www.nature.scot/landscapes-and-habitats/habitat-types/coast-and-seas/coastal-habitats/machair> [Accessed 24.04.19]

Rural people are perhaps better placed to adapt to change yet share wider society's lack of experience in understanding what irrevocable changes will have to be adapted to. Here lie important reengagement opportunities for ecologically and socially motivated artists to connect with practical people who lead traditional lifestyles. Specific community knowledges can inform local organisations and national bodies actions, and may collectively raise awareness of how to achieve local survivability, but these communities do not have the ability to negotiate with such organisations and policy makers, or the skills to make this knowledge visible and accessible.

2.1.3 Eco-Social Art Practices

Artists can help such communities to revitalise themselves through art and cultural activities. They do this by involving local individuals and groups in collaborative, socially and environmentally engaging activities to develop meaningful public spaces where people can meet, celebrate and identify with each other. When supported by local organisations and national bodies these kinds of arts engagements can provide critical reflection on the benefits to the community, and introduce an alternative to the dominant social developmental discourse that can exclude the less vocal, less confident, less certain members of society, particularly where historically their experiential and inherited knowledges have been suppressed. This is important because it expands the body of collective knowledge and confidence as a whole and keeps the community open to change 'from within'. I have explored this approach with several artists who work with communities at various scales and in a variety of methods using local narratives and familiar materials to create innocuous spaces for collaborative action. By acting as conduits, catalysts, or activators they can help to overcome dysfunctional situations by employing creative strategies to unmask local knowledges that address current societal needs, such as social isolation, food insecurity, unhealthy lifestyles, and a growing awareness that climate change will impact us all.

A problem for artists with socio-ecological practices has been in gaining recognition for a praxis that strives to foster new values and visions for human

understanding of the biosphere. Early attempts, by pioneering artists like Helen and Newton Harrison, began by combining art and ecology in the late 1960's, creating functional rather than aesthetic modifications in the landscape to draw the world's attention to human-induced environmental degradation (Ryan, 2015).³¹ Still today, they remain in the borderlands of the contemporary art world. While their work fell within recognised art boundaries of performance and installation, they struggled to gain recognition due to the ecological goals motivating their practice (Harrisons, 2016). At the time their progress was limited by the art world's failure to appreciate the potential of artists' contributions to political and scientific goals, although that view has slowly changed and the Harrisons are now considered to be trailblazers in the move to engage artists with scientific enquiry (Veltman, 2016).³²

Since 2004, the role of culture has been recognised as a key pillar in sustainable development through Agenda 21, the United Nations sustainable development action plan.³³ Alongside science, culture is recognised as a way to envision and foster ideas of sustainability that are relevant to specific communities and regions. Today, it is not unusual for artists to develop their ideas through opportunities to work across disciplines with scientists, politicians, or economists. Even so, contemporary practitioners like Cathy Fitzgerald (2018), who uses the phrase 'eco-social art practice' to encompass slow, durational and

³¹ Ryan, L.A. (2015) *Performing agriculture: The "Survival Pieces" of artists Helen and Newton Harrison* Conference Paper: Association for Environmental Studies and Sciences, At San Diego, California

https://www.researchgate.net/publication/291559175_Performing_agriculture_The_Survival_Pieces_of_artists_Helen_and_Newton_Harrison [Accessed 17.04.19]

³² Veltman, C. (2016) *How Two Santa Cruz Artists Changed the Course of Environmental History* <https://www.kqed.org/arts/11314278/how-two-santa-cruz-artists-changed-the-course-of-environmental-history?fbclid=IwAR0JXl7e6vTWVVM3GMUaU266J5jQNj8IIHYtFdW9lC8-ZEvwdCCtx2O9elQ8> [Accessed 23.04.19]

³³ See *More Than Green*, the multimedia encyclopaedia of environmental, social, economic & cultural sustainability in the urban environment <http://www.morethangreen.es/en/ideology/four-sustainabilities-cultural-economic-social-environmental-sustainability/#sthash.kR77WzY3.dpbs> [Accessed 22.02.19]

transversal praxis,³⁴ knows there are a lack of artists with the Harrisons level of Eco-literacy.³⁵ As a measure to address this, she now advocates for, and herself undertakes some teaching of ‘Eco-literacy in the Arts’ to improve how eco-social art practices can become adopted and more widely understood.

The term ‘eco-social art practice’ combines ecological, and socially-engaged art practices. In *Arts and Sustainability* (2011), and *The Practice of Ecological Art* (2014), trans-disciplinarian Sacha Kagan describes the practice, emerging from the 1960’s, as modes of engagement exploring the complexity of life through shared principles such as connectivity, ethical responsibility, and stewardship. This description shares much with the genre of *socially-engaged art practice* that is anchored in community-led development and uses art to draw the people into talking about and acting on social, political or environmental issues. It involves people and communities in debate, collaboration or social interaction, and this is, at some level, where the art lies. It is led by artists who recognise that the community is the expert in their own lives and works with them to cultivate that understanding more widely.

2.1.4 Listening: the other side of Language

Today, many examples of co-created practice are led by artists working in urban communities. The Rotterdam-based artist, Jeanne Van Heeswijk,³⁶ engages with the setting up of ‘collaborative production’ between people involved in processes of urban development. Her skills-building projects develop the community’s

³⁴ Transversal ways of working include inviting, exploring, curating conversations, experiential art, local and indigenous knowings. <https://hollywoodforest.com/2017/12/04/the-arts-key-role-to-envision-life-sustaining-futures/> [Accessed 22.02.19]

³⁵ Eco-literacy: The ability to engage audiences towards more life-sustaining futures by understanding the complex systems that make life on earth possible. ‘David Orr and Frijtof Capra defined the concept of ‘ecological literacy’ in the 1990s creating a new emphasis on the need for education to impart an understanding of the interdependences between natural processes and human ways of living. <http://www.eco-labs.org/about/eco-literacy> [Accessed 17.04.19]

³⁶ Heeswijk, J. van. Spatial Agency <http://www.spatialagency.net/database/van-heeswijk> [Accessed 11.04.18]

capacity, from ‘communication to construction’, to transform their roles into co-producers rather than merely consumers.

However, in rural communities the extensive productive capacities already present among the people requires artists to take a different approach, I feel. This begins with recognising the importance of the characteristics regarding communities valuable interconnected knowledges and deep links to place, and how they use their environments to sustain their livelihoods. So, finding a way to work that respects and upholds their knowledge is key to developing a good working relationship before attempting to shift mindsets. This approach is as much about showing the community the value of their own knowledge as it is about conveying the capacity of this knowledge to help other communities and wider society to ‘re-think’ how to act locally.

Where previously, the audience might only be considered a passive consumer of the artist’s vision, in order to develop co-creative and co-participatory platforms, an approach is needed that blurs the usual artist/audience boundary. This necessitates the provision of collaborative spaces for focussed discussion and ideas sharing, where listening to and consideration of the opinions of others takes place, allowing differences and doubts to surface that affords the co-creation of something authentic and original to emerge in between. In, *The One and the Many: Contemporary Art in a Global Context* (2011), Grant H. Kester, a leading figure in the critical dialogue around ‘relational’ or ‘dialogical’ art practices, acknowledges the quiet, under-recognised development of artists’ practices such as these that work directly in participation with community. They are delivered in the places where communities live and work and materialise in spaces designed to facilitate emerging creative dialogues. The development of new shared meanings can have the ability to hold people together when it is born out of an airing of opinions and a letting go of positions.

In, *On Dialogue* (1996), theoretical physicist, David Bohm, introduced this concept to enable a ‘free flow of meaning’ in the whole group, out of which new understandings may emerge. This was an attempt to counteract people talking at cross purposes, blocking and distorting the meaning of what others are trying to say. As people engaged in the collective opening out of judgements and

assumptions, they learned more about how they and others think, and also how the process of thought itself participates in the reality that it supposedly is observing and witnessing. A dialogic process like this starts by creating a space where assumptions can be observed, as well as the way that feelings and thought relate to what is said and observations made about them. Dialogue is not about negotiation or persuasion, advancing one's position or attacking another's, but instead, to arrive at a fresh conclusion, it tries to create a realm where people can openly observe the inter-relations between the observer and the observed, and become more aware of how thoughts influence how we feel about things.

This process is not an easy one to initiate. It's challenging to let go of, and not overly defend, our ideas and assumptions. It is even more challenging is to suspend our thoughts in order to be able to step back and observe how we think and feel the way we do. Bohm identified that thought is less attached to personal ideas and more connected to accumulated experience, collective memory and history. In his explorations he observed people participating in the pursuit of common meaning that was constantly being transformed through a process of direct, face-to-face encounter in the 'messiness of everyday human experience'. In his chapter, 'On Communication', Bohm outlines his understanding of the place of *listening* as something other than just a sensitivity to the words of other group members. Herein, he describes how the mis-perception of what is spoken can actually provide the grounds for new common meaning to be developed, as it is only in recognising and then overcoming the 'block' in our own ability to listen well that we are then able to fully open up to what the other is saying. Perhaps this is also why artists who are involved in these dialogic processes are such a valuable addition to the group because they are by their nature creative problem-solvers and usually excel in thinking across and beyond constraints.

Someone who is able to listen with an open mind reveals their willingness to be influenced by what they hear. This can seem to leave the listener overpowered by the other, but it is this very display of vulnerability that enables other participants to expose their vulnerabilities too. Listeners will perhaps have their own strong opinions, but in considering the merit of other people's views

they are able to reflect on their own as well. This attempt to avoid pre-judging is not an easy state to reach, particularly when the views of others turn out to be something one would rather dismiss, or that challenge one's own pre-conceived notions about the speaker or the subject matter. To listen effectively, one must be determined to suspend these associations to understand the speaker on their own terms. This practice avoids anticipation of another's words and listens for the entirety of what they have to say in an effort to understand their ideas while overcoming the urge to judge the principles of their argument.

2.2 Strand 2: Art Practice as Research

The second strand of this chapter considers the process of artists' research practice to develop 'embodied knowing' in terms of 'knowing [as] a physical practice of engagement' (Barad 2007, 342), and aims to define the focus and boundaries of research through current ecological and social art practices. This type of art practice arguably provides a deeper understanding of the need for ecological and social sustainability. Artist contributors present their perspectives on how to facilitate eco-social change and reflect on some of the challenges raised through these engagements. Strand 2 also introduces the broader phenomenon of *Phenology* and *Citizen Science* that is contributing to scientific knowledge, and how this might influence the participatory inclinations and sensing skills development of non-scientifically trained citizens. This contributes to my underlying argument regarding the validity of an arts-led approach to research that evolves knowledges and can contribute to developing collaborative as well as personal perspectives.

2.2.1 Arts-based research

Art has the ability to capture nuanced and complex responses that are often attendant on lived experiences. I have used it to develop new ways of making-with-others, and as a result have gained new insight about my mediating role as an 'educational translator' enabling the multiple understandings and knowledges I

carry as an artist to flow across conventional boundaries.³⁷ The outcomes achieved in artist's research can be seen as new forms of theory grounded in the experienced reality of practitioners' lives. This form of study gives rise to a living theory that positions the artist as 'knowledge worker' capable of generating valid theory while sharing their practice and learning experiences collaboratively. Practice-led research takes shape in artworks that are dynamically engaged with other disciplines, and utilises bodily and material knowledges that can transform our perception of art.

From the early stages of the research, and throughout, I used art practice to allow me to visually and aurally explore core concepts such as the environment, community, climate change, and regenerative practices. This personal investment in creative work as a form of research output is an emergent methodology that relies on reflexivity, which enables an auto-examination of my own sensitivities, responses and motivations and leads me to gradually understand how these influence my actions and thinking throughout the period of enquiry, and beyond (Sullivan, 2005; Barrett and Bolt, 2007; Jagodzinski and Wallin, 2013).

Arts-based research is a hybrid practice that finds its base in qualitative research, yet its practices blur the boundaries of aesthetics and empirical activity as it captures and reflects the complex dynamics involved in the artistic process in its entirety. In *Arts-Based Research: A Critique and a Proposal* (2013) Jan Jagodzinski and Jason Wallin identify arts practice as 'research-in-the-making'. Practitioners explore theories, ideas and experiences by focusing on their own acts of production, so as to redefine praxis that uncovers, records, interprets and positions, from inside of the experience, within the context of professional, contemporary art practices. The resulting works are placed in historical, social and cultural contexts mirroring experience. Practice in the arts that challenges convention is underpinned by structure and improvisation, order and creativity,

³⁷ See Bishop C. (2012) *Artificial Hells: Participatory Art and the Politics of Spectatorship* Chap. 9 Pedagogic Projects: 'How do you bring a classroom to life as if it were a work of art?' Verso, London

experience and intuition. Graeme Sullivan, in *Art Practice as Research* (2010), describes the linking and mutual interdependency of theory and practice:

‘This kind of theorizing involves understanding, which is an adaptive process of human thinking and acting that is informed by our experiences and encounters...our intuition and intellect draw on real-life circumstances that serve as an experiential base that shapes our understanding and allows us to see and do things differently. The capacity to create understanding and thereby critique knowledge is central to visual arts practice, and artists are actively involved in these kinds of thoughtful research processes’ (2010, p96)

2.2.2 In the field: approaches to personal and collaborative practice

In these current, environmentally uncertain times, we can perhaps understand the importance of adopting a new perspective to address chronic challenges or identify unexplored opportunities but shifting our perspective in a meaningful way is not an easy thing for an individual, never mind a society, to do.

Throughout this period of research, I have become more conscious of my own assumptions, processes and perceptions, particularly how I draw on my own tacit understanding of environment and community to explore the potential of artistic research to further the development of the eco-social art field. Practicing as an artist requires me to engage in a process that shifts my perspective all the time, an approach that balances free exploration with an internal stillness to contain the moment of engagement - what I know and what I feel - in an *act* or *work* of art.

In *Unmarked: The Politics of Performance* (1993), Peggy Phelan argues that the non-reproductive power of performance provides a different way of thinking about cultural production and representation. The *act* of art making can be likened to a performance whose only life is ‘in the present’ (Phelan, 1993, p146). ‘Performance implicates the real through the presence of living bodies’ (p148). Artistic research and practice are largely carried out *in performance* – ‘the moment

that the performer with his own idea step[s] in[to] his own mental physical construction³⁸.

When working with both human and non-human communities, artists use their perspective to develop projects that seek to engage participation. Rather than an event with performers presenting to an audience, there is no such division when working in participatory settings. Understanding this aspect is important for an artist setting out to develop a project, because as they intercede in community life they draw from and interpret the cultural material formed in the daily routines they witness. This productive side of everyday lives is often hidden from view. Nevertheless, interpretations *act out* the artist's perspective, and guide project design and potential delivery, but if they exist only in the performer's 'mental and physical construction' (Abramović, 2010 [0:10]) they run the risk of being something for the community to be an audience for, rather than be active in.

The ordinary, routine activities the artist has perceived do not usually lend themselves to scrutiny, yet the artist seeks to make that cultural production visible, by exposing the values, collective norms and invisible rules that guide behaviour and reflect the social and cultural positioning of the activities. Yet, to be able to fully experience society from the inside, they will need first to be 'allowed in' to the community, and this will take time, patience, awareness and sensitivity in order to navigate that collective, community space before full participatory engagement can ever hope to begin. The *performances* that ensue might be a conversation or a formal meeting, a social gathering or an activity. Each one will be unique. Impossible to replicate or fully represent, each is dependent on a combination of motives, cooperation and common trust to create each new stage in the project production.

When this way into the community is not possible, particularly where the artist's positionality is, as a result of the commissioning process, viewed as

³⁸ Abramović M. (2010) *What is performance art?* MOMA.org
<https://www.khanacademy.org/humanities/global-culture/conceptual-performance/v/moma-abramovic-what-is-performance-art> [Accessed online 30.04.19]

‘outsider’, ‘facilitator’, ‘official’ (in representing the commissioning body), what will be the purpose of the art that is produced? I discussed this perspective with Pauline O’Connell,³⁹ an artist based in rural Ireland who examines the ‘trace of human presence and its erasure over time’. We revisited the issues surrounding a socially engaged project she had devised in 2011: *Drawing the Water*⁴⁰, commissioned by Kerry County Council to develop an interactive public art project with community groups in Milltown, Co. Kerry that would lead to ‘permanent’, or ‘event-based artworks’.

For O’Connell, a stranger to this place, the difficulty of devising an inspirational project was typical of the ‘vagabond artist’ position she feels a contemporary artist occupies when undertaking this form of public art commission. These kinds of invitations enable artists to progress new ideas for ephemeral work outside of the gallery space, but their role as ‘authorised visitor’ in the community can hinder attempts to form productive and emblematic engagements. Even so, she was able to exercise a durational approach, staying for longer periods in the community that enabled her to carry out research on the changing composition of the local population that had increased more than tenfold (from 332 to 3,535) in less than ten years. The five satellite housing estates that accommodated the newcomers were like islands at the time, with no infrastructural connectivity – neither footpaths nor streetlights – and were separate from the original community. The unlikely protagonist that connected them however, was ‘The Spout’: a public water scheme built in 1860 that was more than just a place to collect water. It was a socially engineered project in the post famine era, which had also become a vital community meeting place.

The re-telling of stories surrounding this meeting place became the conduit for engagement, and were contained in a video compilation on DVD, and included a 6-minute cine-poem and 23-minute social archive. However, her

³⁹ Audio recorded conversation with Pauline O’Connell held in artist’s studio, Kilkenny, Ireland, on 31 January 2019

⁴⁰ Pauline O’Connell *Drawing the Water* 2012. A % For Art Public Art Project for Milltown, Co. Kerry <http://paulineoconnell.com/drawing-the-water/> [Accessed

commissioner, it transpired, was more focussed on the subject of the ‘free water’: a common feature of Ireland life, until 2012, that is! At the time, O’Connell was not aware that her commissioners were the Irish Waterboard, who were about to introduce water charging for the first time. Her project was suddenly closed down when it was only three-quarters of the way through. Perhaps its potential agency as the basis for an ‘anti-water charge campaign’ was sufficient reason? The real reason can only be guessed at though as no clear communication was ever received by the artist. However, what O’Connell concluded was that:

‘this action made visible the inherent unevenness in exchange relations, counter-positions and engendered assumptions embedded within the commission – one ultimately imbued with power.’⁴¹

As a result of the funders control over the process, this work remains unresolved. This example exposes the limitations for commissioned artists to use their work to unveil the systems that are behind what citizens may experience in society. Despite this, in the pursuit of building a better world, artists need to create conversations with power. Cuban performance artist, Tania Bruguera, devises strategies that have symbolic potency and are ‘political timing specific’, setting up certain conditions that involve people reproducing their own learned behaviours in performances that could be real-life scenarios. ‘Art should intervene at the moment when politics and policies are taking shape’ (Bruguera, 2019).⁴² An example of this is *Tatlin’s Whisper #5* (2007) performed at Tate Modern, *The Living Currency* in 2008. This was a gallery-based performance involving an encounter with two policemen on horseback, who patrolled the space and ‘managed’ the audience using standard crowd control techniques. People did not necessarily recognise this as art, and neither was it presented by the gallery as such. So, rather than a representation of a live event, this

⁴¹ O’Connell, P. (2016) ~~Drawing the Water a contested public art project 2014~~ Paper presentation at ‘Being in Place’, Post Graduate Researchers Conference with Land², and Place International, DJCAD, University of Dundee (November 2016)

⁴² Bruguera, T. (2019) *Notes on Political Timing Specific* Artforum
<https://www.artforum.com/print/201905/notes-on-political-timing-specificity-79513>

intervention had the effect of transforming a commonplace news image (police working amongst protesting crowds) into a ‘real life experience’ for the gallery visitors. Bruguera’s practice draws attention to society’s conditioning that is shaped by political memories and experience and reflects on the ‘complex relationship between agents of authority and the people they aim to control.’⁴³ She uses *Artivism*⁴⁴ (Creative Knowledge + Practical Knowledge = Political Knowledge) as an approach to thinking about a world that works differently for its citizens. Here, the role of art generates an *imaginary shift* through gestures that transform a passive audience into active citizens.

2.2.3 Citizen Science and phenology: the power of observation

The phenomenon of *Citizen Science* and *Phenology* has increased over recent years. People have been watching the life cycles of plants and trees for centuries, keeping records of what they have seen, the timings of plant phases, such as leafing, flowering and fruiting. But with the widespread availability of new technologies and mobile phone applications, record keeping has been transformed into a practice that can be contributed to with the click of a mobile phone app.⁴⁵ This area of science known as *phenology*⁴⁶ is not limited to the study of biological events in plants but is the study of ‘phenomena or happenings’ in ecology and climate, which involves recording and studying the timings of changes over extended time periods. The word comes from the Greek *phaino* - to

⁴³ TATE Tania Bruguera Tatlin’s Whisper #5
<https://www.tate.org.uk/art/artworks/bruguera-tatlins-whisper-5-t12989> [Accessed 23.10.19]

⁴⁴ *Artivism* is a blended linguistic term combining art + activism to ‘create scenarios that advance social criticism’ <https://beautifulrising.org/tool/artivism> [Accessed 21.10.19]

⁴⁵ iNaturalist is one of the world’s most popular nature phone apps helping people to connect with nature through enabling the identification of plants and animals via the sharing of photographs with a community of 750,000 scientists and naturalists worldwide. Uploaded photographs also contribute to the collection of data for scientists working in the field of nature conservation. iNaturalist is a joint initiative by [California Academy of Sciences](#) and the [National Geographic Society](#).
<https://www.inaturalist.org/pages/about> [Accessed 20.05.19]

⁴⁶ Encyclopaedia Britannica descriptive of Phenology
<https://www.britannica.com/science/phenology> [Accessed 01.05.19]

show or appear, and *Logos* - to study. *Citizen science*,⁴⁷ is an extension of this work into the public realm where ordinary citizens collaborate in scientific research through sharing and contributing to data monitoring and collection programmes. Through these, ordinary people are able to channel their personal interests in plants, wildlife or weather, and be guided towards recording specific timing data related to changes in season and climate. This approach is invaluable to the vast collection of climate change data that is contributing to current scientific knowledge on the warming of the planet.⁴⁸ The skills development here are primarily based on improving the ability to make acute sensory observations so as to gather the particular data required. This global development is also taking place in schools⁴⁹ where students are being trained to notice what is going on around them.

‘Citizen science is research accomplished by engaging humans as “sensors” to collect scientific data ...taking advantage of human competencies that can be substantially more sophisticated than machines’⁵⁰

In developing these new skills, the ordinary presences of everyday life become extraordinary, opening up the capacity for wonderment in the observer. This knowledge becomes embodied and cumulative and cannot be unlearned. It draws from the capacity of the human to know itself through embodied connection to all that surrounds it, and, if we are to address the issue of climate

⁴⁷ National Geographic description of the term citizen science <https://www.nationalgeographic.org/encyclopedia/citizen-science/> [Accessed 01.05.19]

⁴⁸ See animation created by NASA’s Goddard Institute for Space Studies showing increase in world temperatures from 1885-2014 <https://earthobservatory.nasa.gov/world-of-change/decadaltemp.php> [Accessed 01.05.19]

⁴⁹ High School students collect phenology data for a citizen science programme called Nature’s Notebook. U of M Extension Citizen Science (2017) *Citizen Science in the Classroom: Phenology* <https://www.youtube.com/watch?v=jSFfvpHXw9I> [Accessed 01.05.19]

⁵⁰ Wiggins, A. Crowston, K. (2015) *Surveying the citizen science landscape*. First Monday Peer-reviewed Journal of the Internet <https://firstmonday.org/article/view/5520/4194#author> [Accessed 01.05.19]

change, is something that needs to be reconnected in our psyches. Artist-performer, Anne-Marie Culhane, has developed this aspect of sensory engagement, both environmentally and intrapersonally, through a ‘communal practice’ that encompasses performative acts such as installation, dance and movement, film and spoken word pieces. These approaches welcome audiences, colleagues and non-human collaborators into the work. In an interview,⁵¹ I asked her to describe how she connects with communities. She explained her process of navigating these different groups of interested parties to bring them together in a creative platform. Her position is that rather than working with existing communities she is involved in creating new communities of interest around a particular theme.

In 2015, she, together with Ruth Levene as artist collaborator, and Peter Lundgren, a wheat farmer, developed *A Field of Wheat*⁵² to explore the complexities of contemporary arable farming, by growing a field of wheat on 22 acres, in Lincolnshire: the home of British wheat production. The project experimented with ways of holding space for dialogue, and coalesced around ideas such as, what does a field of commercially grown wheat entail? What is the system and how does this work? Was it possible to farm arable production as a collective? Can we learn to understand where the industry pressures come from, and how global markets work?

They recruited a broad mix of people, intentionally selling the idea to those who they felt would be curious and support different aspects of the project, such as the business sector, academics from different disciplines, a land agent, the head of agricultural investment with Barclays Bank, and people from local villages including a family and an elder couple. With 42 people, and to ensure that everyone was economically invested in the process, they developed a co-operative collective where each bought a £200 share in the field. The project

⁵¹ Audio recorded conversation with Anne-Marie Culhane held in the artist’s kitchen, Exmouth, on 22 Jan 2019

⁵² Culhane, A-M. *A Field of Wheat*

<https://www.amculhane.co.uk/pages/amfieldwheat.htm> [Accessed 02.05.19]

started with drilling of seed in the autumn, achieved a harvest of 80 tonnes of wheat production, and culminated in a harvest festival in the local village hall the following autumn. A sub-group of the collective co-designed this event around both the elemental aspects of the land and the wheat product, incorporating sound workshops, and buried fabrics to produce artworks, as well as a straw bale structure, and various baked creations.

Throughout the course of the growing season, ‘collective enquiries’ were staged to confront some of the primary issues arising from the project, such as chemical and land-use methods, and ultimately, the future of farming. They knew they wanted to draw into dialogue those with opposing positions: a representative from an Agri-chemical firm and an organic farmer, for example. To hold space for conflict or difference they developed an experimental platform adapted from Quaker guidelines (advised by the local Quaker Meeting House in Brant Broughton, Lincolnshire). They held one live enquiry, and two online enquiries, which shared the same principles. This changed the nature of how discussion is approached by setting out ‘live presence’ principles where people could think about what they wanted to say but were guided to speak ‘in the moment’ rather than from a script. They were encouraged to ‘speak to the silence’, ‘not to prepare what to say in advance’, to ‘speak from one’s own truth’, and ‘try not to be responsive to someone else’, as Culhane explained:

‘You can reference someone else, but you try not to answer them, or attack them. You seek your own ‘truth-moment’ response, which is a rather different approach to how we normally speak.’

The *Field of Wheat* project⁵³ set out to see if it was possible to get a group of ‘differently motivated, trained and experienced’ people to form a community of shared interest around the subject of commercial wheat production. In a similar method to Citizen Science, it used a design process to stage a space for knowledge and trust creation, where people could get involved,

⁵³ Project website <http://fieldofwheat.co.uk/> [Accessed 02.05.19]

learn together and through each other about a fundamental component of human diets. By enabling people to observe and consider a range of implications for their communities, including learning about overarching hierarchies of power and knowledge, artists like O'Connell, Bruguera, and Culhane/Levene, draw more people into awareness of 'expertise', developing their innate sensory competencies to create more *intra-connected communities of interest* that are more capable of addressing some of our societal and ecological problems.

2.3 Strand 3: Process of intergenerational knowledge transfer and why embodied knowledge should be valued

This third strand, introduces the specific foci around collective knowledges, aiming to show what this is, as well as the process of how this knowledge is transferred intergenerationally and socially, via oral and embodied modes. This plays an important part in developing the key argument in my thesis of the need for a revaluing of collective embodied knowledge. To support this claim, I will introduce the concept of *Kaupapa Māori*,⁵⁴ as a perspective on a culture of human and non-human interconnectedness. *Kaupapa Māori* implies a way of framing and structuring the contemporary application of Māori traditional knowledge (*mātauranga Māori*). The capacity of orality as more conducive to knowledge than literacy to convey embodied knowledge will also be introduced, and this section will conclude with a review of how art can be understood as a conveyance to embed knowledge.

Note: Aotearoa is the Māori name for New Zealand but was originally a reference only to North Island. However, since the end of the 19th Century it has been used to refer to the whole country. It is becoming common practice to use the Māori and English names together. Recently this has been the subject of a

⁵⁴ Nepe, T. (1991) *E Hao Nei e Tenei Reanga: Te Toi Huarewa Tipuna: Kaupapa Māori, an Educational Intervention System* MA Thesis, University of Auckland
<https://www.worldcat.org/title/e-hao-nei-e-tenei-reanga-te-toi-huarewa-tipuna-kaupapa-maori-an-educational-intervention-system/oclc/663714618> [Accessed 09.08.18]

petition to officially recognise this,⁵⁵ and so, it is for this reason I will use the dual term Aotearoa/New Zealand, shortened to Aotearoa/NZ, throughout this text.

2.3.1 Justification for Kaupapa Māori Research Approach

A period of comparative research in Aotearoa/NZ set out to gain perspective on the role that indigenous communities with interconnected relationships with environment can play in reversing a trend of devalued practical knowledge (Te Kanawa, 2012). This involved learning about Māori ways (*kaupapa*) and the importance of community knowledge pertaining to this (*mātauranga Māori*). Humans depend on ecosystems and influence them directly through how they use the land, water and air. Māori see themselves as integral parts of ecosystems, and know that their basic necessities such as materials, health, good social relations, security, and freedom of choice and action are provided directly and indirectly by ecosystems. Knowledge of this interdependency supports the ability to care for their land and their people. Their world views are based on interconnected values relating to the environmental and spiritual dimensions and recognise human dependence on ecosystems. As with the island community in Uist, this knowledge has come about through extended processes of observation and interpretation, guided by the underlying values of the community and imparted through a durational process. But, in non-western societies such as a Māori one, an interconnected world view also influences how they value their knowledge.

Kaupapa is variously described as a ‘robust space-making framework’, ‘tool of analysis or theory’, and ‘produce[s] space for work that connects’ (Hoskins & Jones 2017).⁵⁶ A breakdown of the word – *papa*: basis, grounding or

⁵⁵ Petition of Danny Tahau Jobe: Referendum to include Aotearoa in the official name of New Zealand
https://www.parliament.nz/en/pb/petitions/document/PET_78333/petition-of-danny-tahau-jobe-referendum-to-include-aotearoa [Accessed 20.05.19]

⁵⁶ Hoskins T K, Jones, A. (2017) *Critical Conversations in Kaupapa Māori* Somerville, A.T.P. Chap 5 *Te Kete Aro(ha)nui: Kaupapa Māori and the Humanities* Huia Publishers Wellington

platform; and *kanu*: coming into view – might help to express its meaning further but taken out of context these embodied phrases provide only a glimpse of the underlying meaning. There is no description that categorically translates this elusive yet commonplace term, so for the purposes of finding a shorthand explication, I will settle on these non-specific terms, ‘strategy, policy or cause’.⁵⁷

Throughout my research, I have applied a modified version of Participatory Action Research that abstracts from Kaupapa Māori Theory (KMT),⁵⁸ drawing from an approach used by Māori artist-researcher, Professor Huhana (Susan) Smith, in her PhD research project: *Hei Whenua Ora: Hapū and iwi approaches for reinstating valued ecosystems within cultural landscape* (2007).⁵⁹ Here, the interconnectedness of all things is understood within the terms of Māori spiritual, social, and environmental relationships. This approach has been developing over the last 15-20 years, by a growing cohort of Māori scholars spearheaded by Māori academics, Graham Hingangaroa Smith and Linda Tuhiwai Smith,⁶⁰ whose passion and support for improving Māori education, health and wellbeing, has been progressing through the development of KMT as a foundation for theory and research.⁶¹ This research paradigm is now starting to surmount some of the opposition from mainstream academia it experienced at its inception: seen by its devotees as just one more in a series of struggles between state and Māori interests.

Our histories remind us of many acts of resistance to colonial imperialism and struggles of resistance against the forced cultural

⁵⁷ *Kaupapa*: The Free Dictionary <https://www.thefreedictionary.com/kaupapa> [Accessed 21.05.19]

⁵⁸ *Rangahau: Principles of Kaupapa Māori* <http://www.rangahau.co.nz/research-idea/27/> [Accessed 20.05.19]

⁵⁹ Smith, S.M. (2007) *Hei Whenua Ora: Hapū and iwi approaches for reinstating valued ecosystems within cultural landscape* Theses and Dissertations Massey University <https://mro.massey.ac.nz/xmlui/handle/10179/2133> [Accessed 03.10.16]

⁶⁰ Education Gazette Eds. (2017) *Two lifetimes of learning and sharing* <https://gazette.education.govt.nz/articles/two-lifetimes-of-learning-and-sharing/> [Accessed 20.05.19]

⁶¹ For a grounding in the development of this research paradigm, please see Smith, L.T. (2012) *Decolonising Methodologies: Research and Indigenous Peoples* 2nd Revised Ed. Zed Books Ltd, London

genocide imposed in our lands... the imprisonment and death of many of our people and the denial of our language, culture and knowledge bases. (Pihama, 2015, p6)⁶²

While not directly the subject of my PhD research, this stoical position does have resonances with the Uist community, who experienced similar struggles following colonialist intrusion, leading to the prohibition of studying and speaking their native Gaelic language,⁶³ forced exile, violent repatriation during the Clearances,⁶⁴ and imprisonment in the struggle to reclaim confiscated lands.⁶⁵

2.3.2 Mātauranga Māori

Mātauranga is a Māori philosophical term for the pursuit and application of knowledge and understanding and unites knowledge and the Māori world view with the cultural values of its community. More particularly, it is a place-based knowledge that has been acquired by the people about their own natural setting (*mana whenua*) that is precise, accurate and can be rigorously defended. This knowledge has come about through extended processes of observation and interpretation that are guided by the underlying values of the community and imparted through a durational process. It was handed down via intergenerational communication that happens outside of the notion of western education in the

⁶² Pihama, L., Tiakiwai, SJ, Southey, K. (Eds.) (2015) *Kaupapa Rangahau: A Reader A collection of readings from the Kaupapa Rangahau Workshop Series* 'Kaupapa Māori Theory: Transforming Theory in Aotearoa' pp 5-15. Te Kotahi Research Institute, Hamilton Aotearoa/New Zealand

https://www.waikato.ac.nz/_data/assets/pdf_file/0009/339885/Kaupapa-Rangahau-A-Reader_2nd-Edition.pdf [Accessed 20.05.19]

⁶³ De Bruin, A. (2015) *Keeping a Language alive: the pass and future of Gaelic in Scotland* <https://itaint-necessarilyso.squarespace.com/articles/2015/11/12/keeping-a-language-alive-the-past-and-future-of-gaelic-in-scotland> [Accessed 20.05.19]

⁶⁴ *Scottish History of the Highland Clearances* <https://www.britannica.com/topic/Highland-Clearances> [Accessed 20.05.19]

⁶⁵ *Potted history of experiences of Hebridean People* <https://www.hebridespeople.com/history/> [Accessed 20.05.19]
<https://blosslynspace.wordpress.com/2015/11/19/a-monument-to-land-riders/> [Accessed 20.05.19]

classroom. In an oral tradition, knowledge was typically passed on through the telling of stories (*Pūrākau*⁶⁶) where the aim was to provide evidence, and give meaning to prior cultural events, and through practical lessons where the learners' role was to observe, mimic and slowly gain proficiency. But the added implication of the sounds, scents and textures that pervade this learning environment have a deeper effect on the learner than can be conveyed in any quantitative terms. This affords a context for understanding from an embodied perspective that references the natural world, its materials, and conditions, in a 'natural state of co-existence' (Te Kanawa 2008).⁶⁷

Embodied knowledge of co-existence places the human within and dependent on the ecosystem, and because of this traditional Māori knowledge has the potential to be utilised in efforts to tackle some of the effects of climate change. These changes are already being felt across Aotearoa/NZ with increasing summer temperatures and higher winter rainfall creating droughts and flooding events leading to issues of erosion, poor water quality, and soil instability. And, coupled with problems associated with intensive farming methods such as those involving overuse of artificial fertilizers and irrigation, *mātauranga Māori* is underpinning some co-creative approaches to developing solutions.

The declining state of the waterways has led to the design of projects that focus on reversing practices that have left waterways in polluted, overused,

⁶⁶ *Pūrākau* Theory Definition: Pū= Origin + Rākau = Tree

Lee (2005) States; It is not coincidental that the word *Pūrākau* refers to the roots or base (Pū) of the tree (rākau), rather it is significant that 'story telling' derives its meaning in Māori language from words that relate to the tree and bush, since the imagery of tree often reflect our cultural understandings of social relationships, our interconnectedness with each other and the natural environment (p.7). Lee, J. (2005) *Māori cultural regeneration: Pūrākau as Pedagogy*. Paper presented as part of a symposium *Indigenous (Māori) pedagogies: Towards community and cultural regeneration with Te Kawehau Hoskins and Wiremu Doherty*. Centre for Research in lifelong learning International Conference, Stirling, Scotland.

Waretini-Karena, R. (2014) *Pūrākau – Theories, Narratives, Models & Application* <https://www.slideshare.net/Rawiri/prkau-theories-narratives-models-application-40940351> [Accessed online 22.07.18]

⁶⁷ Te Kanawa, K. (2008) *Mai I Te Ao Kohatu Weaving: An Art Form Derived from Mātauranga Māori as a Gift from the Ancestors* *Te Kaharoa*, 1(1). Doi: 10.24135/tekaharoa.v1i1.137 <https://www.tekaharoa.com/index.php/tekaharoa/article/view/137> [Accessed 18.02.19]

or buried states, and aims to foster a duty of care aligned with Māori beliefs that centre on mātauranga Māori. One of these approaches involves presenting ‘what the river would have to say about its current poor state of health’. Professor Daniel Hikuroa, a Māori scholar and earth systems scientist, is Principal Investigator on a number of these community projects, one of which is on *Listening for the Voice of the River*.⁶⁸ Here, he has devised a strategy that uses mātauranga Māori to include the river and all its creatures as stakeholders too: a process of thinking with the *personhood of the river*⁶⁹ rather than just anthropocentrically. In empowering and articulating the voice of the river, the project will focus on reversing practices that have left waterways damaged and aims to foster a duty of care aligned with Māori beliefs that centre on the interconnectedness of all things. These approaches are not exclusive, however, as they compel the non-indigenous population also to reconsider what is important, or *taonga*,⁷⁰ for them. Water quality affects everyone, regardless of race, indigeneity or belief. In giving voice to the river this project challenges communities to consider what happens to their resources when they have forgotten how to value them.

This project is part of several initiatives that work with communities affected by environmental degradation. *Te Awaroa – 1000 Rivers in a State of Ora by 2050*⁷¹ is a nation-wide initiative to get Aotearoa/NZ’s rivers back in a state of

⁶⁸ Dan Hikuroa on *Listening for the Voice of the River*

<https://impolitikal.com/2017/10/23/dan-hikuroa-on-listening-for-the-voice-of-the-river/> [Accessed 16.07.18]

⁶⁹ *Whanganui River given legal status of a person under unique Treaty of Waitangi settlement*. New Zealand Herald 15.03.17

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11818858 [Accessed online 24.07.18]

Te Awa Taupua Act 2017 (Whanganui River Claims Settlement)

<http://www.legislation.govt.nz/act/public/2017/0007/latest/whole.html> (Accessed online 24.07.18)

⁷⁰ *Taonga* (noun) treasure, anything prized - applied to anything considered to be of value including socially or culturally valuable objects, resources, phenomenon, ideas and techniques. <http://maoridictionary.co.nz/search?keywords=taonga> [Accessed 20.07.18]

⁷¹ *Te Tai Ao - Natural Environment* <http://www.maramatanga.ac.nz/project/te-awaroa-1000-rivers-state-ora-2050> [Accessed 16.07.18]

good health, or *ora*.⁷² While Government policies do call for a coordinated approach from all users of the river, this has proved difficult to accomplish due to the patchy response so far. This failure to achieve current goals has led to a call for wider involvement from local communities who hold previously undervalued ways of knowing, to apply their 'locally relevant' practices and work collectively on achieving the intended outcome. Two community groups living along the rivers have now invited the *Te Awaroa* project to work with them and other stakeholders (businesses, experts, NGO's), to share their stories, practical skills and knowledge in a 'culturally based discourse' (Lee, 2005) that will lead to long term river health and sustainability, and may have an even greater impact on national policy making in the future.

2.3.3 Orality vs literacy

In oral communication, speaker and listener are always present to each other, taking note of subtle feedback from both sides that can inform and develop dialogue. Writing imprints on the page something definitive and final. The writer is no longer present when the reader reads their words. When knowledge is written down it can perhaps gain a sense of permanence, whereas knowledge that is spoken out is more immediate. Walter Ong (1968) claimed this is largely because of the different senses employed in reading, as opposed to listening: the first using the sense of sight, and the latter, hearing. The written word presents an observable surface; the spoken word is ephemeral: 'sound exists only when it is going out of existence' (Ong, 1969).⁷³

According to Ong, the experience of human development and the potential for abstract thinking and discursive reasoning is founded in a literate

⁷² *Oru*(verb) to be alive, well, safe, cured, recovered, healthy, fit, healed
<http://maoridictionary.co.nz/word/4791> [Accessed online 23.07.18]

⁷³ As a professor in the English Department at St Louis University, Walter Ong wrote *World View and World as Event*, as a presentation at Wenner-Gren Foundation Burg Warterstein symposium no. 41, 'World Views: Their Nature and Their Role in Culture,' August 2-11, 1968. Ong, W.J. (1969) *World as View and World as Event* Wiley Online Library
<https://anthrosource.onlinelibrary.wiley.com/doi/pdf/10.1525/aa.1969.71.4.02a00030>
[Accessed 20.05.19]

culture that was not present in oral cultures. He explains this as a shift from the implicit sense of things in tangible active thinking by pre-literate cultures, to the explicit concepts articulated through abstract thinking of ‘modern, technologised man’. *Visualism*, is the privileging of vision over other means of sensory perception and identified by Ong as the bias in how we think. Terms such as ‘insight, intuition, theory, idea, evidence, species, speculation, discern, distinct, form, theory, field of knowledge, object’ all invoke a sense of envisioned thinking, whereas words such as ‘category, predicate, judgement, response’ arise from dialogue and debate: knowledge acquired aurally and orally through listening and talking. (Ong 1977 pp133-134).⁷⁴

technologized man ... think[s] of actuality as something essentially picturable and to think of knowledge itself by analogy with visual activity to the exclusion, more or less, of the other senses. Oral or nonwriting cultures tend much more to cast up actuality in comprehensive auditory terms, such as voice and harmony. Their “world” is not so markedly something spread out before the eyes as a “view” but rather something dynamic and relatively unpredictable, an event-world rather than an object-world, highly personal, overtly polemic, fostering sound-oriented, traditionalist personality structures less interiorized and solipsistic than those of technologized man. (Ong, 1969, p634)

Literate humans were freed from a need to memorise knowledge that was necessarily thematic and highly formalised, and often compressed into *mnemonics*, a memorial prompt mechanism that encoded information within proverbs, epic poetry, and storytelling through the invention of heroic characters. This format shaped culture around a traditionalist and conservative mindset, inhibiting individual experimentation, and preserving wisdom within a hierarchy

⁷⁴ Ong, W.J. (1977) *Interfaces of the Word: Studies in the evolution of consciousness and culture I see what you say: Sense analogies for intellect* (pp 121-144) Cornell University Press, Ithaca, NY

of specialist knowledge holders. This process of knowledge transfer also helped to maintain the hierarchical structure of society where the elders could uphold their respected positions (Goody 1977).⁷⁵ However, it's important to note here that these were not verbatim word-for-word recitals: whilst the essence of the narrative would remain intact, the malleability of interpretation was controlled by the orator. Oral cultures externalised their emotions through inflected, intonated expression. In this way, the presentation of intergenerational knowledge was always embodied and adapting its form to better convey meaning to the ears of the audience.

In the video documentary, *Homer and the Oral traditions*,⁷⁶ a contemporary Irish Bard, who as a non-literate, Gaelic-only speaker still operated in the 'full oral tradition', showed that even in the 21st century, it was still possible to transmit orally a poem as extensive as that of Homer's *Iliad*⁷⁷ (14,000 verses). In a formulaic and repetitive style of speech that was similar to *The Iliad*, John Henry recounted epic tales in alliterative and ancient, elemental terms. But without anyone to pass his knowledge onto, his was a dying artform. It would seem that such 'guardians of tradition' no longer hold knowledge that is relevant to modern society.

The ability to write enabled knowledge to be stored outside of the mind, which created space for new thoughts and the advancement of new ideas. The written form originated as a result of fast-growing empires and society's appraisal needs to itemise, quantify, and index; enabling accurate data storage that could not have been contained in memory. Writing had an effect on speech. It was invented by people who lived in urban settings, rather than by nomadic herdsmen, or farmers. Literacy started to replace orally conveyed consciousness,

⁷⁵ 'Goody on the Differences between Orality and Literacy' from Goody, J. (1977) *The Domestication of the Savage Mind (Themes in the Social Sciences)* Cambridge University Press <http://neamathisi.com/literacies/chapter-1-literacies-on-a-human-scale/goody-on-the-differences-between-orality-and-literacy> [Accessed 15.04.19]

⁷⁶ Homer and the Oral Traditions <https://www.youtube.com/watch?v=K08vUnVpHcw> [Accessed 21.05.19]

⁷⁷ Synopsis of The Iliad https://www.ancient-literature.com/greece_homer_iliad.html [Accessed 21.05.19]

opening up the potential for greater understanding of rationality, truth and facts, in the development of science and literature.

2.3.4 Art as a conveyance of knowledge

Despite human progression through written and mental developments, mankind has maintained a need to express itself in artistic forms. As an example, during one of the last pre-modern moments, the *tughra* of Sultan Suleiman the Magnificent⁷⁸ was drawn on a sheet of heavy paper.⁷⁹ A remnant of the Ottoman Empire: a superpower that dominated the region extending from the Persian border to North Africa, to the western Mediterranean, from Tunis to Trieste, and across to the lower reaches of Russia.

This *tughra* is the calligraphic signature of a sultan, made toward the end of his rule 1555-60. The inscription reads ‘Sulieman Sah, ibn Selim Sah, Han, Al-Muzaffer Dimen (the victorious forever)’, and would have been attached to every administrative document he influenced. It names the Sultan in Arabic and serves as his official seal. Visually, it is a presentation of natural forms within lines of cobalt blue, and edged with gold leaf are swirls containing exotic intricately executed flowerbeds. It is likely to be a document giving a ‘major grant of land’, which might explain why the document survived for a later collector to separate the signature element from the original and sell it as a work of art in itself.

⁷⁸ *Tughra* (Official Signature of Sultan Suleiman the Magnificent in Istanbul. Khan Academy <https://www.khanacademy.org/humanities/art-islam/islamic-art-late-period/v/getting-lost> [Accessed 23.05.19]

⁷⁹ Podcast Neil MacGregor’s *History of the World in 100 Objects The Threshold of the Modern World (1375-1550 AD)* Tughra of Suleiman The Magnificent <https://www.bbc.co.uk/programmes/b00tn9vc> [Accessed 23.05.19]

As such, it formed part of a collection presented in *A History of the World in 100 objects*, by the then director of the British Museum, Neil MacGregor. In 2010, he undertook to present a 100-part radio programme of 15-minute programmes broadcast in a year-long series on BBC Radio 4, with an accompanying book. It was an extraordinary undertaking to present a hand-picked collection of objects from the British Museum that could relate how societies organised themselves, viewed their place in the world and traded with and fought their neighbours. It represented a period of worldwide human history from 2 million years up until the present day. The intention was to present as many aspects of the whole of human experience as possible, not just that of the rich and powerful, demonstrating how each object lies at the intersection of

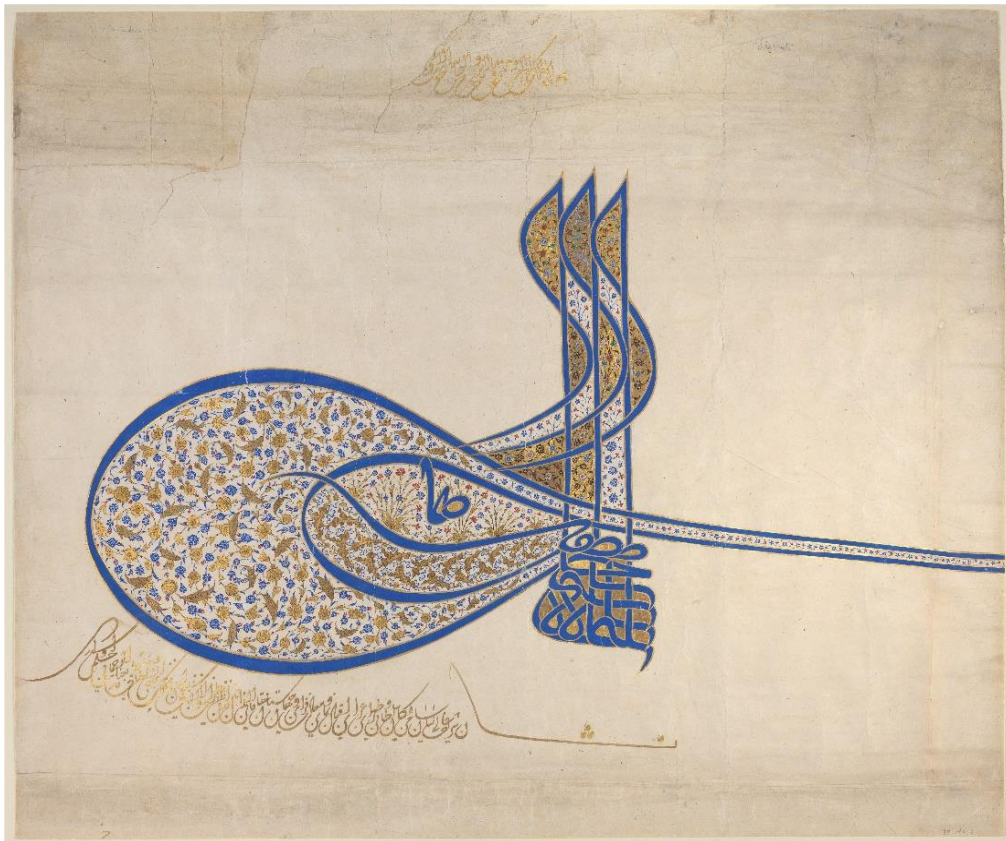


Figure 2-2 Tughra of Sultan Süleiman the Magnificent (r. 1520–66) (Reproduced from an image available online at Metropolitan Museum of Art <https://www.metmuseum.org/art/collection/search/449534>)

multiple socioeconomic, military, and religious developments.

This aspect of objects' abilities to 'speak' to us, is discussed in *Non-human Others and Kaupapa Maori Research* (Hoskins & Jones, 2017). It is a discourse

on Kaupapa Māori Theory, and questions why there is little discussion around the accepted Māori view that the material things of the world can ‘speak’ to human beings. Co-written by Professor Alison Jones, a non-Māori New Zealander, and her Māori colleague, Te Kawehau Hoskins, it incorporates the work of *New Materialists*, Karan Barad and Jane Bennett, which presents discourses that consider ‘the material-and-more-than-material’ realities experienced by humans and non-humans alike in their apprehensions of material encounters. This might be considered a ‘return’ to matter in the context of historical materialism’s concern for embodied circumstances.

Their essay, discusses the potential meaning behind the drawing made by Hongi Hika, a Māori chief, on the 1819 Kerikeri land deed,⁸⁰ of his *moko* (facial tattoo), and the writers’ view of it as ‘speaking subject’ rather than a signature. The drawing Hongi Hika made in 1819 (Original Source: Hocken Library, University of Otago Ref: 508-122 - MS-0070/A) can be seen in a good reproduction online in an essay by Hoskins & Jones (2016, p76) *A Mark on Paper: The Matter of Indigenous-Settler History*.⁸¹ The authors explore the drawing’s complexity, conveying the entanglement of ‘agency of materials involved in its making - paper, ink, quill - our interpretative gaze, the authority and desires of the mark-maker, and the myriad of elements coming together in the mark’ (i.e. environmental as well as political incidents around the signing of the Treaty of Waitangi in 1840).⁸²

⁸⁰ The 1819 Kerikeri land deed was considered by the Crown as a sale of 13000 acres of land by the Māori chief in return for 48 axes.
<file:///Users/lauradonkers/Downloads/Kerikeri%20Mission%20House.pdf> [Accessed 24.05.19]

⁸¹ Alison Jones explained in an email the sensitivity around reproduction of this image: ‘I hope you will be able to do your writing without using the moko image from our article. The moko is from the face of an ancestor, and because we needed permission to reproduce it (at least, Te Kawehau is from the tribal region, so it was under her authority we used it), I do not think it appropriate to reuse it elsewhere. Sorry about that, Alison’
 For a good reproduction, see Hoskins & Jones (2016) *A Mark on Paper: The Matter of Indigenous-Settler History* Posthuman Research Practices in Education pp75-92. Palgrave, Macmillan https://link.springer.com/chapter/10.1057%2F9781137453082_6 [Accessed 15.0.19]

⁸² The Treaty of Waitangi is an agreement made in 1840 between representatives of the British Crown and more than 500 Māori chiefs. It resulted in the declaration of British

This drawing has a more rudimentary execution than Suleiman's calligraphic *tughra*, but the meaning and intention behind it are of no less magnitude. It was rendered in ink on a paper land deed, on 4th November 1819, by Māori chief Hongi Hika of Ngāpuhi⁸³ on the occasion of the transfer of 13,000 acres of land to the Church Missionary Society, in return for forty-eight axes. For this act, Hongi Hika is sometimes remembered in less than generous terms, as this drawing was interpreted as a signature and understood as evidence that he had sold the land to European buyers for some tools. Hoskins and Jones set out to show that this is a gross misperception underpinned not only by a failure of translation between two languages and cultures, but by a lacking in the western mind to grasp the interconnectedness of matter and meaning contained within the presence of the drawing of the *moko* mark. They reject the idea that this land would have been sold, but instead the transaction was intended as a ceremonial gift exchange (*tuku*), at the beginning of a relationship.

However, rather than debate the intentions of the *moko* they employ a KMT approach, focusing instead on the physicality of its 'thingliness' (Bennett, 2010) and what the *moko* might have to say as an 'organic speaking subject'. Hongi Hika drew his *moko* as a trace of his identity, as he had noted in his experience with Europeans that the imprint of a signature was a sign of a person's authority. As his chiefly authority was written on his face, he invented this mark as an equivalent ritual. The Māori world takes it for granted that objects can speak and act. It is part of their ontology that developed out of their particular experience and understanding of living in an environment to which they understood themselves as integral. It is normal for 'objects' to be thought of as exerting forces or instructing people, having *mana* (a form of presence or authority) and *mauri* (vigour, and potentiality). 'Such immersive study is an encounter with the intricacies in the objects murmurings, not heard at first' (p

sovereignty over New Zealand by Lieutenant Governor William Hobson in May 1840. <https://teara.govt.nz/en/treaty-of-waitangi/page-1> [Accessed 23.05.19]

⁸³ Ngāpuhi are a Māori iwi (tribe) located in the Northland region of Aotearoa/New Zealand

56). In this context, the *moko* still lives, and because of this, Hongi Hika is still present: we are face-to-face with him, invited again into an active relationship through an inanimate object that *acts* on us.

To conclude, the *moko* drawing is a ‘doing’ rather than a thing, a ‘congealing of agency’ (Barad, 2008, p139)⁸⁴ as Barad puts it that encompasses the paper, the ink, the quill, and the maker, coming together in the mark through all the natural elements, people and actions that caused this entanglement. This is useful as an example for this research project because as researchers, we are also caught up within this confusion of signifiers and need to be aware of how our agency influences direction. ‘All we can do methodologically in the face of these complexities is to remain engaged and quietly and openly forestall interpretation.’ (Hoskins & Jones, p60)

⁸⁴ Barad, K. (2008) *Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter*. In S. Alaimo & S.J. Hekman (Eds) *Material Feminisms* (pp 120-156). Bloomington, Indiana University Press
https://monoskop.org/images/5/56/Alaimo_Stacy_Heikman_Susan_eds_Material_Feminisms.pdf [Accessed 16.09.19]

Chapter 3: Methods and Ethics

This chapter will comprise of two strands which present the design of the study and research methods used, followed by an extended discussion on the ethical approach taken throughout the process of working in community-based practice. In the first part of this chapter, I will present the research methods I have used, and how I have adapted them in the course of developing my research methodology. I have drawn primarily on Participatory Action Research (PAR)⁸⁵ which is often used in this type of qualitative investigation. However, I applied a modified version developed in Aotearoa/NZ that draws on Kaupapa Māori Theory (KMT)⁸⁶ where the interconnectedness of all things is understood in indigenous peoples' spiritual, social, and environmental relationships. This approach is also underpinned by art-based methods including photography, drawing and digital recordings combined with field research processes, such as recorded interviews as well as botanical and landscape surveys. The second part of this chapter will present an extended discussion on ethical practice, particularly where interactions expose explicit and implicit knowledges. These areas of personal community interactions require good judgement decisions for which artists are not often trained. The potential for dilemmas which can arise from these encounters will be explored in this section, particularly where they affected the subsequent design and delivery of the projects. I will also reflect on the current view of ethics within artistic community-based practice through the

⁸⁵ 'Using PAR, qualitative features of an individual's feelings, views, and patterns are revealed without control or manipulation from the researcher. The participant is active in making informed decisions throughout all aspects of the research process for the primary purpose of imparting social change; a specific action (or actions) is the ultimate goal.' MacDonald C. (2012) *Understanding Participatory Action Research: A Qualitative Research Methodology Option* Canadian Journal of Action Research Volume 13, Issue 2, 2012, pages 34-50

<https://pdfs.semanticscholar.org/3b78/ecfe0b4a0a7591d2ea068c71e8ea320ff451.pdf> [Accessed 10.11.18]

⁸⁶ Kaupapa Māori Theory provides a strong foundation of indigenous knowledge, theories and values

dissemination of an interview with environment art professional, Kerry Morrison, and her essay *Let's Talk About Ethics* (2018),⁸⁷ wherein she reviewed the current view of ethics in socially engaged art practice for the Social Art Summit.⁸⁸

3.1 Strand 4: Design of Study and Research Methods

3.1.1 Research Methods

The key work that was undertaken during the first three years of this research project comprised of working with six groups of residents in their own localities to develop community food growing hubs. The purpose of these was to address several issues including lack of access to local, fresh fruit and vegetables; poor public transport networks that exacerbated social and geographical isolation; and, dwindling opportunities for daily social interaction and physical activity, with the central aim of introducing a basic level of Climate Literacy⁸⁹ at community level.

I used a Participatory Action Research (PAR) methodology because of its emphasis on the roles of participation and action within communities, and how it assists in revealing the personal views of individuals in a process that aims to assist social change. PAR is considered to be democratic, equitable, and liberating for participants as they are able to generate meaning through working together.⁹⁰ In this respectful shared space I was able to navigate the terrain of community relations to create integrated working spaces where the food growing

⁸⁷ Morrison, K. (2018) *Social Works?: Open 'Let's Talk About Ethics'* pp36-48 Axisweb <https://www.axisweb.org/models-of-validation/content/social-works/2018/social-works-open/>

⁸⁸ The Social Art Summit was held in Sheffield on 1-2 November 2018 for artists to come together and share practice, showcase work and explore what it meant to be making art through social engagement at the current time. <https://www.socialartsummit.com/info> [Accessed online 18.04.19]

⁸⁹ *Climate Literacy* is developing an understanding about human influence on the climate, and the climate's influence on human society. Climate Literacy Framework https://downloads.globalchange.gov/Literacy/climate_literacy_highres_english.pdf [Accessed online 18.04.19]

⁹⁰ Koch, T., Selim, P., Kralik, D. (2002) *Enhancing lives through the development of a community based participatory action-research programme* <https://www.ncbi.nlm.nih.gov/pubmed/11845746> [Accessed 10.11.18]

projects could be developed in a mutually supportive way that reflected each locality's demographic and also drew from the collective embodied knowledges of each group. For example, Site 1 consisted mainly of incomers;⁹¹ Site 2 attracted mainly male participants; Site 3 comprised mostly of young families; Site 4 attracted an intergenerational group of islanders; Site 5 was mainly retired people; and, Site 6 was a mixed, intergenerational group.

The PAR approach was working well as a means to assist productive collaboration in the different groups. However, I felt that there was a lack of underpinning theory to enable me to show that community embodied knowledge was contributing to the project development. My research journey led me to undertake a period of research in Aotearoa/NZ. It came about through a discussion with an artist who introduced me to the research practice of Māori artist and scholar, Professor Huhana Smith. In the mid 2000s she developed a PhD project working with her local tribe (*imi*) to reinstate the river, estuary and beach ecosystem according to traditional cultural *Kaupapa Māori* principles. I was fascinated to read how the community had responded to the project, but was also intrigued to find out what this term actually meant. I will share her research on this and subsequent projects later in Chapter 6.

I expanded my project methodology by drawing from Kaupapa Māori Theory (KMT), which is an academic approach that retrieves space for Māori voices and perspectives, particularly where it affords new perspective into community-led collective thinking and action. Led by Māori scholars, this theory has been developing since 1980, to highlight indigeneity and the multidisciplinary approaches that contribute to indigenous development. It acknowledges teaching and learning practices that are inherent and unique to Māori culture. My hope was that this additional aspect might help me develop a greater understanding of Māori embeddedness in the natural world that was similar to something I had recognised in the Uist community, but that hitherto I had felt unable to express.

⁹¹ The term 'incomers' is used here to describe an immigrant or newcomer to the myriad of small townships (each with approx.15-30 inhabitants) that comprise mostly of the Outer Hebridean Island's island-born population.

A better articulation of this could perhaps help non-Māori communities realise the value of their own knowledges to address issues of universal concern, such as how to approach climate change adaption at community level.

Kaupapa Māori - literally 'a Māori way' - is understood to be about Māori, by Māori and for Māori and, therefore, some consider (Smith, 1999) that non-indigenous researchers should not borrow from it. Among many other outcomes, it is considered to empower marginalised groups, affording 'possibilities for resistance, liberation and transformation'.⁹² It is for this capacity that I wanted to develop my understanding about how the realm of indigenous research is strengthened by KMT, and ascertain if elements of the theory lend themselves to helping communities generally, such as the one in Uist, start to voice their knowledge of interconnectivity and adaptability.⁹³ This might help the power dynamics change so that island-born residents can contribute their important knowledges in culturally, politically and environmentally significant ways.

Kaupapa Māori theory then provides a platform from which Māori are striving to articulate their own reality and experience, their own personal truth as an alternative to the homogenization and silence that is required of them within mainstream New Zealand society. Inherent in this approach is an understanding that Māori have fundamentally different ways of seeing and thinking about the world and simply wish to be able to live in accordance with that specific and unique identity. (Rangimarie Mahukia, 2008)

⁹² Mahukia, R. (2008) *Kaupapa Māori theory is critical and anti-colonial*. MAI Review, 2008, 3, Article 4
https://www.researchgate.net/publication/26569994_Kaupapa_Maori_theory_is_critical_and_anti-colonial [Accessed online 14.11.18]

⁹³ While respecting Linda Tuhiwai Smith's concern to protect her Māori heritage from misuse and eventual dissolution, the ideas and knowledge behind Māori lived philosophy is exactly equivalent to the lived and experiential knowledge which is at the heart of my thesis, and therefore equally applicable to the Uists.

3.1.2 Deep Mapping Approaches

All these different methods of gathering data have produced layers of place-based historical, cultural and visual information, and I have used the process of Deep Mapping⁹⁴ to help identify overlapping aspects of hitherto under-researched sited knowledge to draw this information into new narratives or visual formats. Deep mapping processes are a form of fieldwork, and require of their practitioners a diverse set of engagement abilities that encompass observational, auditory, discursive, ambulatory, and literary skills, which are performed in the lived spaces of Others.

‘There’s no single definition of deep mapping. It’s a trajectory, a constellation of shifting impulses – in many ways ultimately educational – rather than a unified set of technical approaches or a creative methodology.’ (Biggs, 2014)

3.1.3 Design of study and research methods

In brief, the methodology has involved:

- Establishing a co-creative programme for community involvement framed by artistic practice; and, to frame this method, the terms of ‘co-creative’ participation is defined;
- Gathering layers of place-based historical, cultural and visual information into a new narrative or visual formats for educational purposes in a method of deep-mapping;
- Consultation exercises/focus groups to record personal responses to a series of project outputs, incorporating multiple perspectives, various overlapping elements of specifically sited phenomena and histories, and overinscribing both natural and human-made elements;

⁹⁴ Biggs, I. (2014) *Deep Mapping - A Partial View*.
<http://www.iaibiggs.co.uk/2014/10/deep-mapping-a-partial-view/> [accessed online 07.11.16]

- Surveys and case studies capturing data on changing attitudes and behaviours towards climate change issues;
- Researcher's Reflexive Journal – the logistics of the study.

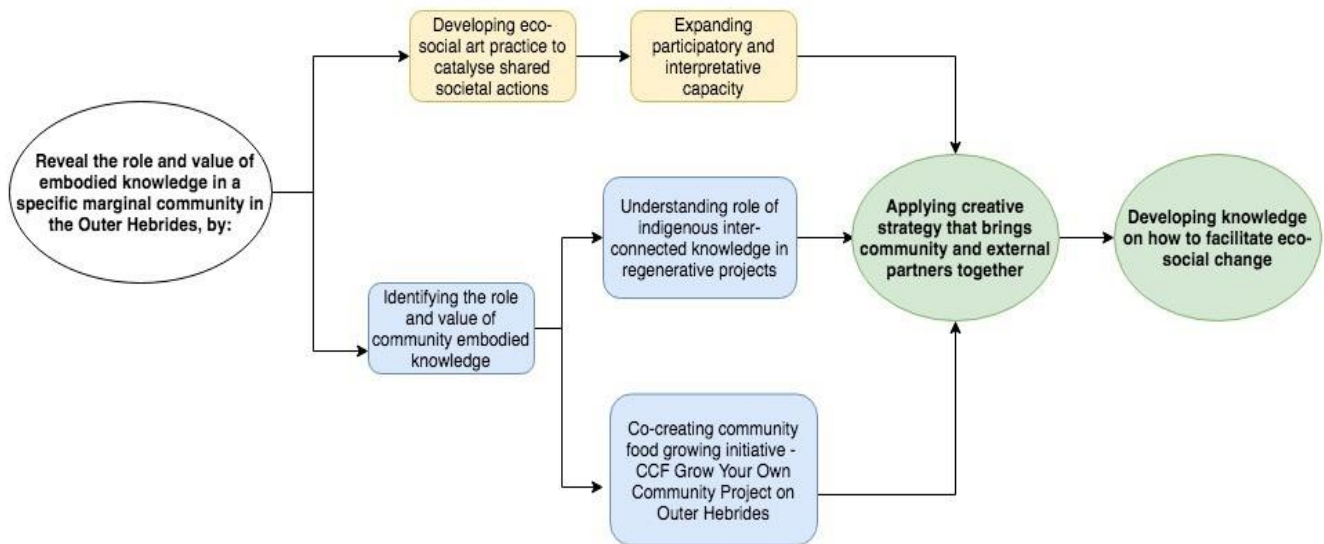


Figure 3-1 FLOW CHART – illustrating the relationships of practice to community projects

code: Yellow = artistic practice; Blue = community practice; Green = behavioural change strategies and knowledge

3.1.4 Establishing a Co-Creative Programme for Community Involvement Framed by Artistic Practice

3.1.4.1 Artist facilitated integrated working spaces

My focus has been on identifying, through several lenses, evidence of community embodied knowledge as a means to engage participants in understanding that their specific set of knowledges they have accumulated through lived experience. It is through intergenerational dissemination of this wisdom that the shared experiential knowledge becomes a valuable resource to their own communities. Furthermore, I believe this knowledge can be deployed in such a way as to improve the means by which ecological and social regeneration are achieved and

sustained. In the early stages of research this was initiated in several ways, through:

- *Proposition for a Reading Group* events, which were designed interactions to form temporary ‘communities of practice’,⁹⁵ with fellow artists and researchers, at conferences, symposiums and workshops. These involved ‘The Monument Game’ Playing Cards I had designed to explore how participants interacted with each other and the cards through the premise of a children’s card game.
- Short-term community projects, such as *Reclaiming the Knowledge*, *Uist Growers Almanac*, and *Sewing Wildflowers*

As the research developed, I worked with two local organisations, Tagsa Uibhist and Cothrom Ltd, to create and develop a series of community food-growing projects - ‘Local Food for Local People’ and ‘Grow Your Own Community’, funded through the Scottish Government’s Climate Challenge Fund.

- Tagsa Uibhist⁹⁶ is a voluntary organisation based in Balivanich, Benbecula providing community services that meet the needs of the elderly and vulnerable population in Uist through provision of their own ‘Care at Home Service’. In addition, they provide a popular community transport service, and a Mental Health and Wellbeing Outreach Project offering support and information to help individuals manage their mental health.
- Cothrom Ltd⁹⁷ is a community development organisation in South Uist predominantly providing certificated training opportunities, as

⁹⁵ ‘Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.’ <https://wenger-trayner.com/introduction-to-communities-of-practice/> [Accessed online 18.4.19]

⁹⁶ <https://www.tagsauibhist.co.uk/>

⁹⁷ <https://www.cothrom.net/>

well as running a full-time Gaelic pre-school nursery, a recycling enterprise ‘Re-store’, and a community economic development team.

- Climate Challenge Fund⁹⁸ supported by the Scottish Government and administered by Keep Scotland Beautiful,⁹⁹ funds community projects that directly assist the community to act on, and adapt to climate change. By April 2018 over 1,000 communities in Scotland had been supported to reduce their carbon emissions output through projects that undertake to grow local food; or, reduce, recycle and reuse waste materials; or, reduce home energy costs and reliance on fossil fuels, and encourage urban bicycle use.

The engagement projects I have designed and led have taken place within site-specific, artist-facilitated integrated working spaces. These are spaces of possibility, much like an artist’s studio. People would take part for a variety of reasons and in several contexts after responding to invitations. These ‘activations’ afforded people the capacity to respond collectively, whether they were strangers or acquaintances, self-nominated or organisation-led, which resulted in an expression of human desire to work together with the goal of achieving a positive collective outcome. These integrated working spaces were set up in places as diverse as a sports hall in Glasgow; a University Library in St Andrews; an international artists’ conference in Quebec; the grounds of several croft sites in Uist, Outer Hebrides; and, within 65 hectares of urban forest in Auckland.

Throughout the PhD research period, I also undertook several artist residencies to develop and expand my own artistic practice while reflecting on these core issues. I wanted to work in completely new environments where I could explore the terrain with fresh eyes, engage with other practitioners, and discuss and develop my ideas. These took place with DRAWinternational¹⁰⁰ in

⁹⁸ The Climate Challenge Fund <https://news.gov.scot/news/climate-challenge-fund-1>

⁹⁹ Keep Scotland Beautiful <https://www.keepsotlandbeautiful.org/>

¹⁰⁰ DRAWinternational <http://www.draw-international.com/>

France, Kunstverein Schwedt eV¹⁰¹ in Germany, and at the latter end of the research period with the Kaipātiki Project Environment Centre¹⁰² in Auckland, Aotearoa New Zealand. Also, throughout the research period I met with and interviewed artists who were working in similar fields of practice to my own.

In 2018-19, I undertook international research in Aotearoa/NZ to develop my understanding of embodied knowledge. This comprised of a 4-month period as Visiting Doctoral Researcher at University of Auckland's Elam School of Fine Art (Aug-Nov 2018), followed by another separate 3-month artist residency at the Kaipātiki Project Environment Centre, Auckland (March-May 2019). This final residency would further develop my understanding of Kaupapa Māori Theory and how it is realised in practice at community organisation level; work creatively with the community to identify opportunities to solve local environmental challenges; and examine how my creative approach related to and could contribute towards the organisation's underpinning objective to help communities live more sustainably.

3.1.4.2 Definition of 'co-creative' participation

To illuminate the ecological and social relationships of people to their environment I needed participants to be actively involved in the unfolding process of creating and gathering data that would provide the necessary evidence of people's inherent relationship to their own knowledge, to each other and to the natural environment. Co-creation begins by focusing on the experiences of those who would be involved in or affected by the activities taking place. For this to work well the participant groups needed to meet and get to know one another, however briefly, share their experiences, and gain some value from these interactions so that all parties acquired a deeper understanding of what was taking place and believed it to hold some value for them. Each engagement process was initiated through invitations to take part, so that no one felt coerced

¹⁰¹ <https://www.kunstverein-schwedt.de/landschaftspleinair/>

¹⁰² <http://kaipatiki.org.nz/>

into collaborating. This aspect created a degree of vulnerability for the projects, but also gave an important space of trust for participants to feel that they were taking part on their own terms.

Co-creative participation was achieved through several approaches centring on the identification of spaces for people to come together to generate and take part in activities that developed ecological and social conversations. The creation of communal understanding was the goal. This process of using co-creation to benefit the community and organisations, is explored more fully in Chapter 5.

3.1.5 Deep Mapping

The process of Deep Mapping can be thought of as gathering layers of place-based historical, cultural and visual information into a new narrative or visual format for educational purposes. This can help identify overlapping aspects of hitherto under-researched sited, relational and embodied knowledges, and draw this information into new narratives or visual formats, which I presented either as interactive happenings, or as co-produced exhibitions.

3.1.5.1 Title: The Monument Game: Proposition for a Reading Group

Type: Communal Performance at Conference and Symposium Workshop

Summary: Interactive workshop with delegates to engage in a session that takes the form of a card game, via a multi-layered and ever changing visual/verbal space using a set of Monument Game cards (56) to play a child's card game "Go Fish".

The *Monument Game* is a deep map that investigates aspects of the bio-cultural heritage of the Outer Hebrides, through exploring the riddle of how a Monkey Puzzle tree came to be planted on a small island in Loch an Eilean,



Figure 3-2 Monument Game, SGSAH The Stuff of Research Symposium, Kelvin Hall, Glasgow 2016

Askernish, South Uist during the time of the Highland Clearances, exposing the long term effects of these actions that to this day still resonate in the land and the people.

Each group of 4 players is issued with a set of *Monument Game* playing cards and instructions on how to play the child's card game 'Go Fish'. The cards introduce layers of place-based historical, cultural and visual information via a series of texts and images that the participants encounter together as they proceed through the various stages of the game. The game rules demand that players read out their card before asking for another, and so a new narrative and visual format is gradually disclosed. It is designed this way for edifying purposes, and also in an effort to engage the senses of the players. This happens through the interactive format and via a multi-layered and ever changing visual/verbal space. It is intriguing how quickly and for a brief time a temporary community is created around the table, where leaders form, hilarity and cheating ensue, and a growing connection with the unfolding story develops.

The game was played out in a variety of collaborative sessions, such as at several doctoral research symposia, an international cultural exchange conference, and as part of guest lectures with undergraduate students. The aim was to bring the players together in a convivial gathering where they would be

introduced to a selection of information and a series of images, and through following the rules of the game would collectively learn about the historical, botanical and social history of a tiny island in the Outer Hebrides, also gaining insights into the practices of environmental artists working to raise awareness of contemporary ecological issues. Participants were encouraged to digitally record game activity and then reflect on outcomes in written or verbal format. (See this footage in *Thesis Volume 1: Supplementary Videos*).

3.1.5.2 Title: Meeting Ground

Type: Co-produced Gallery Exhibition (Taigh Chearsabhagh Museum and Gallery, Isle of North Uist)

Detail of works:

- *MEETING GROUND* – Single Channel, HD Video installation (16:10 minutes) (See this footage in *Thesis Volume 1: Meeting Ground*)
- Collection of 6 x group photographs mounted in light-boxes (taken by the growers)
- 2 x wooden benches (re-used fish farm timbers 4.5m x 0.2m) that create a meeting point in the gallery
- Community Meal (on Opening Night) where all attendees were invited to contribute a plate of food to share around a table placed in the gallery.

Summary: This exhibition was co-produced with growers from the network of *Community Polycrubs*,¹⁰³ and shown in Taigh Chearsabhagh Museum and Art Centre (20 Sep – 26 Oct, 2019). It was scheduled to open on the opening day of *Global Climate Strike*¹⁰⁴ with a Community Meal of produce grown in the Polycrubs.

¹⁰³ *Polycrubs* are robust, durable and resilient polytunnel designed and produced by a homegrown community-owned company in Shetland info@polycrub.co.uk. They were chosen as a suitable structure to support a new community growing venture in the Uists, from 2015-2018.

¹⁰⁴ See *Global Climate Strike* 20-27 September 2019 <https://globalclimatestrike.net/> [Accessed 28.10.19]

Meeting Ground references the recent Climate Challenge Fund projects (2015-18) which I co-designed and co-led through my work as Project Leader at local community organisation Tagsa Uibhist - *Local Food for Local People* (2015-17) and *Grow Your Own Community* (2017-18). The *Meeting Ground* exhibition approaches the subject of community growing projects in an interesting parallel with the Māori perspective on community practices. The dimensions of the gallery are employed to evoke the scale of the Polycrub. The central premise of this exhibition is to show the importance of coming together as a community. The way this works in most cultures is through meeting up in formal and informal ways. The title of this work, *Meeting Ground* comes from a description of the Māori term *Marae* as the focal point of their communities, 'a place to belong, hold meetings and other important social events such as celebrations and funerals'.¹⁰⁵

A primary reason why the *Grow Your Own Community* projects have been successful is because the groups came together out of mutual interest, developed ways of working together, and were able to sustain this by overcoming problems as they appeared. The community of growers rose to the challenge of working in

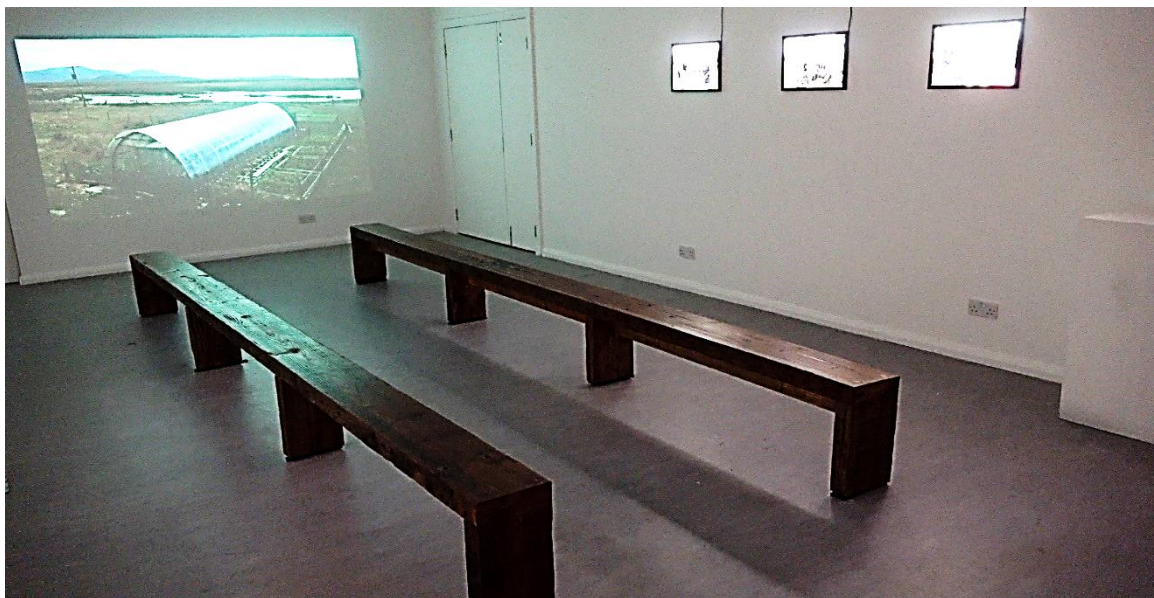


Figure 3-3 Meeting Ground Exhibition, 2019, Taigh Chearsabhagh Museum & Art Centre (Installation)

¹⁰⁵ *Marae* <https://www.newzealand.com/int/feature/marae-maori-meeting-grounds/>

a confined space with people they may not have known particularly well, to do something they aspired to - growing their own produce. So, while the emphasis was on the growing activity, they could not achieve this successfully without also attending to the needs of the group. The installation is designed so that the two benches provide a meeting space for visitors in the gallery. This is to highlight the fact that once sufficient horticultural practice has been carried out the actual growing activity happens whether people observe it or not, but human relationships need more attention. The title of the piece covers all these aspects. *Meeting Ground* involves showing visually how the participants literally got to understand how to work with the soil and its organisms; and the community growing facilities provide a place where growers can come together and work in important but informal ways. Members of the groups have commented on the pleasure they experienced in being able to visit neighbours in these social spaces where they would not feel they were intruding. While others commented that, once they saw that someone else had arrived, they might decide to head over and catch up.

Communities need their common spaces where people can come out from their homes and be seen and meet others. The Opening Night of the exhibition, provided a similar experience where people came out to review the video but also share experiences, discuss growing successes and generally share in the conviviality of being part of a 'growers movement'. This was also way of encouraging them into the gallery so that they could connect with the exhibition as something they had co-created, and recognise their significant contribution to.

3.1.5.3 Re- Generation

Type: Gallery Exhibition (NorthArt, Auckland, Aotearoa/NZ)

Detail of works:

- *Re- Generation, 2019* – Single Channel, HD Video installation (11:10 minutes) - represents 'The Work' of our generation to RE- Educate ourselves to RE- Spect, RE- Store and RE- Generate our environment. (See this footage in *Thesis Volume 1: Re- Generation, 2019*)

- *Okuti Valley Works*, 2016 - Mulberry paper (480x720mm), with charcoal, graphite and soft pastel

Summary: A body of work that explores the bio-cultural significance of Aotearoa/NZ's native forest reserves. Comprising of a single-channel HD video (10:10 min), and a series of frottage drawings based on native trees. *Re- Generation*, 2019 is shot from the perspective of trainee coordinators, following the teaching of Kaipātiki Project's - Charmaine Bailie - as she conveys her approach to environmental restoration, and working sensitively both on the Kākā Reserve (aka Jessie Tonar Scout Reserve), and with each other. This video conveys Kaipātiki Project's approach to shifting the community's actions towards an environmentally regenerative future through community activation that promotes interconnectedness across the whole ecosystem and uses creative strategies to assist with reconnecting community with place. Accompanying the video are a set of 10 frottage works, made with the last native trees in the tiny Okuti Valley Reserve, Banks Peninsular, South Island, in 2016.

This exhibition was shown in NorthArt (9-25 September, 2019) as part of National Conservation Week. NorthArt is a busy gallery in the centre of



Figure 3-4 Okuti Valley Reserve Series #1-10, 2016, Re-Generation Exhibition, 2019, NorthArt, Auckland

Northcote, a vibrant suburb of Auckland's North Shore, and is where the Awataha Greenway Project, of which the Kākā Reserve (aka Jessie Tonar Scout Reserve) is located. (See Chapter 6 for more detail).

3.1.6 Consultation exercises/focus groups reports to record personal responses to a series of project outputs

I have taken several approaches to public consultation that have been incorporated into the design of art exhibitions, public workshops and community activations. The purpose of this approach is to create inclusive spaces for people to invest their time, actions and reflections, and feel that this is something they have been part of, and can see that their involvement has been significant.

Outcomes of these exercises are contained in online publications (see weblinks):

- *Re-Using Fish Farm Waste to make Horticultural Structures* (2017); and *Grow Your Own Community CCF-4968* (Final Report) (2018). See <https://issuu.com/growyourowncommunity>
- *Reclaiming the Knowledge Data Gathering Project* (End of Project Report) (2016); *The Uist Growers Almanac* (2016); *Sowing Wildflowers Exhibition* (2016); *Local Food for Local People CCF 3812* (Final Report) (2016); *Local Food for Local People CCF 4744* (Final Report) (2017). See <https://issuu.com/localfoodforlocalpeople>

3.1.7 Surveys and case studies capturing data on changing attitudes and behaviours towards climate change issues are detailed

Survey and case studies were developed throughout the duration of the Scottish Government's Climate Challenge Fund Projects: *Local Food for Local People CCF-3812*¹⁰⁶ and *CCF-4744*;¹⁰⁷ and *Grow Your Own Community CCF-4968*.¹⁰⁸

Details of these are contained in online resources, namely:

¹⁰⁶ One-year project from 2015-16

¹⁰⁷ One-year project from 2016-17

¹⁰⁸ One-year project from 2017-18

- the project website <http://www.localfood-uist.co.uk/grow-your-own-community>
- online publications at <https://issuu.com/growyourowncommunity> and <https://issuu.com/localfoodforlocalpeople>

3.1.7.1 *The Reclaiming the Knowledge Schools Project*

The *Reclaiming the Knowledge* Schools Project was developed with input from all the islands schools in order to gather baseline data about current horticultural food production. School pupils were trained to become crowd cartographers and gather data on Garden and Croft production in their home townships and communities, through a survey that they also helped to write. Baseline Data was processed using technology available through Scottish Agriculture Consultants to produce printed maps showing areas and rates of production. The project engaged the different generations with the *Local Food for Local People* aims, and documented land use from a horticultural perspective, by:

1. Recording accurate information on current horticultural land use
2. Enabling the accurate collecting of data for new production during the project's lifetime
3. Engaging the community by:
 - recognising the islands historical capacity for self sufficiency
 - recognising current growing capacity
 - recognising current knowledge and skills
 - enabling sensible targeting of areas for expansion and training development

3.1.7.2 *The Uist Growers Almanac*

The Uist Growers Almanac was produced using the data gathered through the survey. This was a horticultural publication that aimed to share the rich resource of local knowledge and skills on growing fruit and vegetables successfully in the challenging and wild landscape of the islands of Uist and Benbecula, Outer Hebrides. Online publication at the following link:

https://issuu.com/localfoodforlocalpeople/docs/the_wild_growers_almanac_the_natura_b5efd8efda6728

3.1.7.3 The Sewing Wildflowers Project for Grow Wild

‘Sewing Wildflowers’ was a Community Project for GROW WILD and part of *Local Food for Local People CCF-4744*, funded by the Scottish Government’s Climate Challenge Fund. GROW WILD was the UK’s biggest-ever wild flower campaign, bringing people together to transform local spaces with native, pollinator-friendly wild flower plants to motivate communities to come together to transform local spaces by sowing, growing and enjoying UK native wild flower.

The aims for this project were to increase the number of endemic wildflower species growing at the allotment site to encourage more beneficial insects and pollinators; and, to engage young people creatively in the importance of biodiversity to growing food. Young people (aged 12-15) became involved in growing wildflower plants specifically endemic to the region, from seed, caring for them and then planting them out around the site. A team of local biodiversity experts, as well as local arts and crafts practitioners delivered a youth and general public programme of activities and events to develop and nurture an interest in the wider importance of biodiversity, as well as to local food growing activities. A catalogue of project images and details of outcomes can be found at the archived Community Projects page on GROW WILD website, at the following link: <https://www.growwilduk.com/community-projects/sewing-wildflowers>

The 6-month project began in April 2017 and culminated in the *Sewing Wildflowers* Exhibition at Museum nan Eilean, Sgoil Lionacleit, Isle of Benbecula (9th Sep to 29th Oct 2017). The work presented included an installation of project photographs contained in petri dishes; a large communal sewn work and was accompanied by a project catalogue. This is available as an online publication, at the following link:

https://issuu.com/localfoodforlocalpeople/docs/sewing_wildflowers_publication

3.1.8 Researcher's Reflexive Journal

A series of journals (5) have been written throughout the process of the research recording analytical and methodological decisions (the logistics of the study), and the progress of the project including preconceptions, beliefs, values, and assumptions that appeared during the research process.

3.2 Strand 5: Process of approaching ethical concerns raised through working in community-based practice

In this section, I set out my ethical considerations while working in community-based practice and describe several dilemmas I encountered that re-directed parts of the design and delivery of the Uist-based projects showcased in this thesis. In community-situated arts practice, all forms of community interactions require good judgement decisions particularly around ethical issues that arise. As a practitioner, it is important to consider the influence one has on the community and environment, 'simply by being there',¹⁰⁹ and as a result of the actions generated through projects. Also, given that I was living and working as a known member of the community, this position compounded my need to show through my actions that I did not take for granted the trust extended to me as local inhabitant.

3.2.1 Ethical considerations

When I began my PhD research (Jun 2015), on a part-time basis, I was already employed as project leader (p/t) on the Climate Challenge Fund project, *Local Food for Local People CCF-3812 (2015-16)*. Following discussions with my PhD supervisor, employers, and steering committee, we agreed that this project could potentially provide a suitable case study for my research into the value of community embodied knowledge. At this stage, my role as researcher was

¹⁰⁹ Bolt, B. et al (2016) *iDARE Creative arts research approaches to ethics: new ways to address situated practices in action* Proceeding of the 12th Biennial Quality in Postgraduate Research Conference (QPR 2016), Adelaide, South Australia, 20-22 April 2016, pp. 98-105 https://www.academia.edu/29061375/Creative_Arts_Research_Approaches_to_Ethics_New_ways_to_address_situated_practices_in_action [Accessed 29.07.19]

consistent with that of project leader, limited to developing and delivering project activities as laid out in the project plan. I decided not to carry out any additional data collection activities, such as interviewing, oral history interviews, or group discussions specifically related to my PhD research project, until I had developed a clearer understanding of my research area.

After this initial project, I continued to deliver the role as project leader as a self-employed consultant for the following two CCF projects, both of which I had successfully devised and applied for funding for – *Local Food for Local People* CCF-4744 and, *Grow Your Own Community* CCF-4968. I continued my research also on a part-time basis until October 2017, when I received support to study full-time, having been awarded a full scholarship from Scottish Graduate School of Arts and Humanities (SGSAH) AHRC Creative Economies Studentship.

3.2.2 Ethical approval for low-risk projects

Prior to heading out to Aotearoa/NZ to begin a 4-month period of research (Aug-Nov 2018), I applied for ethical approval for low-risk projects following guidelines in Dundee University's Code of Practice for Non-Clinical Research on Human Participants (see Appendix).¹¹⁰ My study was designed using an inductive, qualitative research strategy, and applied using a case study research design, drawing on multiple data collection methods. This strategy examined the nature and role of community embodied knowledge in Uist (UK) and Aotearoa/NZ, and was structured around two phases.

Phase 1: A broad examination of community embodied knowledge

- Stage 1 of this research took place at Elam School of Art, University of Auckland, Aotearoa/NZ, under the SGSAH *Visiting Doctoral Researcher Programme*, where I intended to examine the role of Kaupapa Māori praxis in how students were taught within a contemporary art framework.

¹¹⁰ Documentation created as part of this submission to University of Dundee's Ethics Committee is supplied as an appendix to this thesis.

- Stage 2 took place in Uist through semi-structured interviews arranged with members of the community who work in crofting and horticulture, as well as key members of community initiatives. Data collection was undertaken using semi-structured interviews, and oral history interviews.

Phase 2: In-depth examination of a community project where embodied knowledge contributes towards creating environmental sustainability

- The *Grow Your Own Community* project was the focus of this phase to examine in depth the eco-social factors that shaped the relationship between social capital and environmental resilience at the community level. Data was gathered using practice-based methods, such as oral history interviews, group discussions, workshops and exhibitions. These became forms of community engagement, interacting with the creative aspects of the project, drawing on paradigms that illuminated the eco-social relationships of people with their environment.

3.2.3 Project Background

The CCF project funds would cover the cost of developing new community growing sites by providing 12x4m Polycrubs;¹¹¹ all construction costs including internally built raised beds, complete with topsoil and manure; and a paid support worker (for one year) drawn from each local community. A Call for Expressions of Interest (EOI) was publicly launched in local newspapers and online, calling for members of the community interested in having a Polycrub in their community, to contact us. We announced that we were looking for a level site of at least 5x13m, as near as possible to social housing and young families. Ownership or permission to use the site must be forthcoming and fully

¹¹¹ Polycrubs are Polyunnel/greenhouse hybrids designed in Shetland and built to withstand high wind speeds and the harshest of climates using recycled fish farm waste in some of the construction. <https://www.polycrub.co.uk/> [Accessed 21.07.19]

supported by the Community Council. Once agreed, Planning Permission must be sought by the landowner or their agent as early as possible

3.2.4 Ethical concerns raised through community-based practice

Throughout the development of the food growing projects I experienced real-world, ethical dilemmas that led to decisions to alter parts of the design and delivery of the projects. The main issues arose in the process of securing permission for sites on which to build the community polycrubs. On three separate occasions I had to make the difficult decision to withdraw plans and find new sites, which is significant, given that we erected only six polycrubs in total. Given the short-term nature of one-year horticultural projects there is a very tight timeframe in which to achieve the planned outcomes, so delays to planning are always going to create some difficult moments.

The first objection came from the landowner's agent who, at a late stage, revealed he had a personal aversion to the look of polycrubs and did not want to see one built in his village. The proposal had been to construct a polycrub at Taigh Chearsabhagh Museum and Art Centre (TC), North Uist, for use by the local community. While this proposal had been approved in Dec 2015 by the TC Board, in the interim, no activity had taken place to further this aim. It was frustrating because the plans had been developed, and letters of support had been supplied months in advance, in full agreement with the landowner. Yet, as things were not progressing, I held a face-to-face meeting with the parties involved and the underlying issue was disclosed. As no compromise could be reached, we decided to seek another site elsewhere in North Uist that would enable us to deliver the desired level of community engagement. This situation left us very behind schedule, without a site to erect the polycrub or a community to use it, and delays to this project starting meant that the important food growing target for this facility was not achieved. However, the experience revealed that both time and action is needed to get productive discussions underway. At the new site, the Community Council were very effective in following up on their promises, along with locally based staff at Hebridean Housing Partnership who appreciated the benefits of the project for their

tenants. Action from the community was also forthcoming, with several able and proactive individuals coming forward to form a user group.

The next issue arose with a croft site, and a neighbour's objection to the construction of a polycrub so near to the road, potentially exacerbating road congestion problems. Even though the objection was not upheld by the local authority's planning officer, we decided to rescind the planning application as we felt the neighbour had a good point, and that it was best to avoid a negative effect on the project before it had even begun. In the end, a suitable croft location was found within the same township, which was more accessible to other members of the community, and the original site became the venue for a workshop to use fish-farm waste materials to build smaller scale horticultural structures. As a result, we built a small polytunnel and windbreak fence on the site, which settled the matter for the original party.

The third dispute was based on the proposed use of communal land. An objection to the planning application came from a household who had lived adjacent to the site for over 30 years. We were quietly informed of the problem, but due to privacy regulations the identity of the complainant could not be disclosed and therefore not personally addressed. To tackle this dilemma, I decided to hold a public meeting to discuss the proposals and hopefully 'smoke out' the complainant. The meeting was well attended, but the plaintiff was not present, although halfway through discussions a couple did enter the meeting room. They both appeared agitated, which I thought was due to their lateness, however it transpired that they were the ones who had objected and had come to proclaim their frustration at the way the project had been foisted on to them without any consultation. I was able to explain to them that the local amenity trust had consulted with the community (although clearly not comprehensively) before offering the site to us for development, and that the nature of our work was not to impose a facility where it was not wanted. I proposed that we would relocate the facility to another area, but this was met with enormous dismay from the others present who were in favour of the development. It was clear from the couple's testimony that they were not going to back down yet were visibly uncomfortable about causing their neighbours to face the prospect of losing to

another village such a valuable facility. It was a tense exchange, but we settled on an agreement to find a new site over the weekend. Remarkably, by Monday afternoon the original planning application had been rescinded and a new application made for a preferred location in the same village.

The planning department informed us later that they would not have upheld the objection and planning permission would have gone through. Frustrating though it was, having witnessed the genuine anger and dismay in the complainants, it was clearly right to have listened to and dealt with their objections. When I had capitulated, stating we would withdraw the plan, it was profound to witness the man's change of expression, from red-faced rage to stunned silence. His objections had been listened to, considered and upheld with the minimum of delay yet was perhaps not the response he had been expecting to hear. While it caused consternation amongst other attendees that they might lose the chance of a community polycrumb, I think it was important for everyone to see and hear that unfavourable opinions need to be voiced, have the potential to be upheld and alternative solutions found.

These examples convey what ethical wisdom (*phronesis*) entails for practitioners working in situated practice and illustrates the important role the community plays in determining an authentic field of ethics. 'Ethical know-how is situated, contextual, and a mainstay of all professional practices in action' (Bolt, B. et al 2016 p 1).¹¹² Despite the challenges, it is vital to the development of eco-social approaches where practitioners wish to foster new values and visions for human understanding that the artist explicitly involves the views, actions and conscience of as many members of the community as possible. These three

¹¹²Bolt, B. et al (2016) *iDARE Creative arts research approaches to ethics: new ways to address situated practices in action* Proceeding of the 12th Biennial Quality in Postgraduate Research Conference (QPR 2016), Adelaide, South Australia, 20-22 April 2016, pp. 98-105 https://www.academia.edu/29061375/Creative_Arts_Research_Approaches_to_Ethics_New_ways_to_address_situated_practices_in_action [Accessed 29.07.19]

examples provide a snapshot of how individual opinion has the potential to derail the desires of the collective. It can be viewed as having been perilous to allow individual voices to hold sway over vital decision-making but individuals are what constitute small communities, and ignoring dissenting opinion can be deemed a greater risk if it leads to polarisation of communities, and defamation of a community project.

It is also an observation of mine that Uist people are generally reluctant to publicly voice their complaints about new initiatives, preferring instead to use anonymous formats, namely Planning Objections. However, these are not often the best way to get concerns reviewed as these will be assessed according to formal definitions and narrow guidelines that cannot hope to reflect the diversity of opinion on the ground. From my perspective as an eco-social practitioner, project outcomes and goals require sufficient flexibility, underpinned by the values of respect, patience and deep listening, to enable an inclusivity that accounts for the complex nature of community needs that, hopefully, engenders similar approaches when addressing the needs of the environment too.

3.2.5 Discussing Ethics with Kerry Morrison¹¹³

These areas of personal community interactions require good judgement decisions for which artists are not often trained. To reflect on the current view of ethics within socially-based artistic practice, I undertook to interview Kerry Morrison,¹¹⁴ co-founder of *In-Situ*,¹¹⁵ which is an artist-led organisation embedding art into everyday life in Pendle, England. She had recently published an essay 'Let's Talk About Ethics' in *Social Works? Open* (Smith, Revetz, Senior 2018) as part of the Social Art Summit,¹¹⁶ which was an artist-led review of

¹¹³ Interview with Kerry Morrison took place in her kitchen on 12.12.18

¹¹⁴ Smith, M., Ravetz, A., Senior, R. (2018) *Social Works? Open* Morrison, K. 'Let's Talk About Ethics' pp36-48 <https://www.axisweb.org/models-of-validation/content/social-works/2018/social-works-open/>

¹¹⁵ <http://www.in-situ.org.uk/about/> [Accessed 24.09.19]

¹¹⁶ The Social Art Summit was held in Sheffield on 1-2 November 2018 for artists to come together and share practice, showcase work and explore what it meant to be making art through social engagement at the current time. <https://www.socialartsummit.com/info> [Accessed online 18.04.19]

socially engaged arts practice in the UK held in Sheffield (2018). Like me, she is a socio-environmental artist who works in local contexts, and uses embedded and responsive approaches towards relationship, partnership and coalition-building to collectively address local environmental and societal issues. In 2015, she completed an interdisciplinary PhD in Environmental and Life Sciences at the University of Salford.

I was keen to discuss her perception of the role of ethics in the particular engagements we are both involved with through our practices. Much of our work is predicated on the ‘casual conversation’. Here, the artist creates a space for the person to speak by listening. This can often mean that certain sensitive information is shared that can expose that person to exploitation but relies on the artist to make a good judgement call to keep this discrete. Further to this, she highlighted the ease with which artists visually record the actions of people in everyday situations that may be anonymous to distant audiences but well known to local ones. How these individuals are represented locally can profoundly matter, and therefore the artist’s awareness of this matters too.

We discussed how ethical practice had been reviewed at the Social Art Summit (SAS). She described the audience as a diverse group of practitioners from youth and community development, arts organisations, curators and artists. She felt the room was divided: on one side, the youth and development practitioners were amazed that a code of ethical practice was not already firmly embedded as part of socially-engaged practice; and on the other side, artists voiced problems with codes of practice that may undermine their important role in society as ‘agitators or provocateurs’ by removing artistic freedoms. From her perspective, she felt that a code of practice, rather than restricting freedom, would instead provide a useful framework that protects both sides from similar vulnerabilities: giving an example of the lone artist with a group of young people who, for whatever reason, make a complaint against them, and how that person would have no defence unless, having understood the potential for this, had put protective measures in place.

She highlighted the lack of ethical training undertaken by arts practitioners unless crossing into the more interdisciplinary social science fields,

where ethics training is standard. This raises several questions around who should be delivering a level of training that offers the necessary protections? And, how can socially engaged artists address the ethical positions encountered in their work? At the SAS session, the idea of ‘agreeing with co-creators some ethical points before developing an ethical code together’ was viewed as a sensible way forward. This could draw from a set of standards to raise awareness of potential issues that could then be customised collectively by each particular group. But this raises yet more issues: Who writes this code of ethics? And, should it sit with organisations?

Morrison cited the incorporation of an ethical framework at the arts organisation, *In-Situ*, which can be found on their website,¹¹⁷ and is included in employment contracts. In this case, the organisation is taking on the role of monitoring ethical practice, which includes ethical environmental practice too. However, this suggestion was completely rejected by representatives of organisations involved in the discussion at SAS, as they felt this responsibility lay solely with commissioned practitioners who should develop their own ‘ethical stance’. This contradicted the already stated attitude of those artists present that it would restrict their artistic freedoms, exposing the dilemma of defining ethical practice for all parties, and even a fear of being able to talk about it.

Morrison hoped that the lead they had taken in developing an ethical framework at *In-Situ*, might foreground the need for this level of ethical consideration more widely. However, for now, it remained firmly at the margins of concern for both organisations and individual practitioners. She was grateful to Social Works¹¹⁸ (a programme of support for socially-engaged artistic practice led by Axisweb and Manchester Metropolitan University) for the chance to talk about ethics, but continues to lament the gap created by this lack of a ‘code of practice’ for affecting how we can work professionally as artists with our communities.

¹¹⁷ *In-Situ* ‘practices within a set of principles or considerations that inform how we work with others and the environment’ <http://www.in-situ.org.uk/ethics/> [Accessed 24.09.19]

¹¹⁸ <https://www.axisweb.org/social-works/> [Accessed 24.09.19]

Chapter 4: Eco-Social Art Practice

Here, I describe the agency of my eco-social embeddedness, and how it has influenced my feelings of connection and in turn, motivated and informed my research. This has led to the articulation of my practice and identity as an environmental artist who works with community embodied knowledge. This involves a necessarily durational and emplaced experience that has afforded me sufficient time to consider where best to progress the interpretive and participatory elements of my aesthetic practice as a means to co-creatively engage others in discourse and activity in eco-social sustainability matters that are beneficial to the community and also beneficial to the development of contemporary artistic practices. Co-creation implies that both human and non-human participants are active in the unfolding process of creating and gathering evidence that reveals their interdependent knowledges.

4.1 Strand 6: How can co-creative artistic approaches help to develop strategic promotion of eco-social sustainability?

4.1.1 Eco-social artist embedded in community as 'Incomer'

To live on an island, within the defining boundaries of the sea, has an uncanny effect on the mindset of a person, particularly an urbanite, as I once was. A topography of open, bare, mostly flat land, with some elevation to the east affords 360-degree views from almost anywhere. The Atlantic Ocean stretches out into the west, towards a land one imagines lying on the other side. Vision is dominated by the power of the peripheral, the exterior that enfolds a person. A sense of *islandness*, (Conkling, 2007)¹¹⁹ imposes a metaphysical state on the perceiver relating to feelings of isolation inflicted by that body of water. This

¹¹⁹ Conkling, P. (2007). *On Islanders and Islandness*. *Geographical Review*, 97(2), 191-201. Retrieved from <http://www.jstor.org/stable/30034161> [Accessed 28.05.19]

translates into awareness of the human doggedness necessary to cope with the physical challenges and limitations, financial pressures, and sometimes fear, levied on communities living in close daily proximity to the imposing forces of nature. Here, humans are the minority in the macrocosm; subordinates entangled in a sometimes-tense interdependent unity founded on common rituals that bring security, fellowship, humour, sympathy and compassion. Understanding this dynamic symbiotic relationship is key to sustaining human life on islands such as Uist.

For over thirty years, I have lived in the southern island chain in the Outer Hebrides, known as the Uists, where I have worked as a horticulturalist, artist and researcher. The population of less than 5000 people is a largely island-born community, widely spread across several islands with between 4 and 15 people per square kilometer¹²⁰ inhabiting small, close-knit townships of crofters and fishermen, as well as all the other occupations needed to sustain a community. The archipelago's economic activities are reliant on the primary industries of tourism, crofting, and fishing that are dependent on the environment for continued livelihood.

Despite my position as incomer, (a term, which at its simplest, describes a resident who does not originate from the island)¹²¹ I have come to appreciate that my ability to connect is greater when I am embedded on both 'sides' of that community - as local inhabitant, subordinate to common issues and concerns, and as community project leader with heterogeneous artistic and productive skills founded in environmental experience. Over the course of this time I have come to *know* and be *known by* the community there. Without this social embeddedness, I could not have undertaken the sort of work I do, which relies

¹²⁰ Comhairle nan Eilean Siar: *Island Populations* <https://www.cne-siar.gov.uk/strategy-performance-and-research/outer-hebrides-factfile/population/island-populations/> [accessed 05.02.19]

¹²¹ McKinlay, A. & McVittie, C. (2007) *Local, incomers and intra-national migration: Place-identities and a Scottish island*. British Journal of Psychology, 46, 171-190 The British Psychology Society <https://onlinelibrary.wiley.com/doi/pdf/10.1348/014466606X96958> [Accessed 28.05.19]

on mutual trust and understanding, as well as a familiarity with the way that individuals and society co-exist locally. It is a community interconnected across several planes of knowledge. Connected to the land, sea, seasons and with strong intergenerational and societal bonds, people exhibit a broad skills base extending across several identities; and, with shared lifeworld beliefs, people continue to pass knowledge on through generations.

I want to explore the collective wisdom that is held within the community, which encompasses a specific set of knowledges accumulated through lived experience, as well as intergenerational and inherited knowledges developed through the microcosm of geographically defined and contained communities. Through my research activities I have been able to show that this wisdom can be used as a method for reengaging human awareness of ecological changes that threaten current and future populations. When used together with an artistic, co-creative approach, it can begin to bring local people, community organisations and national partners together into an open learning environment that acknowledges and addresses some areas of specific collective value. This combined approach involves understanding mutuality, like-mindedness, or kinship, through a visual register concerned with environment, human interactions and social context, acting in spaces of the everyday, negotiating the personal, social and political realm of the individual and the collective — in place. This co-creative practice involves developing an interpretive and participatory position within the community, contributing to eco-social actions, designing creative spaces for engagement, and creating interactive multi-media artworks that record and express the embodied knowledge of that community.

4.1.2 Putting agential realism into practice

Throughout the PhD research period, I undertook several artist residencies to develop and expand my own artistic practice. I wanted to work in completely new environments away from my habitual island base, where I could explore new terrain and engage with other practitioners to discuss and develop my ideas from a different perspective. These took place in France, Germany, and at the latter end of the research period, in Aotearoa/NZ.

During 2015, I was artist-in-residence, at DRAWinternational, an art centre based in southern France, in Caylus, a 13th Century mediaeval village in the Tarne-et-Garonne, Midi-Pyrenees region. A village built into and out of a dramatic topography of steep, stone hills and dense oak trees: a community implanted in its landscape. While in this divergent mainland setting, I read the words of American feminist physicist, Karen Barad, for the first time. As I tramped the footpaths through the hills, oak woods, limestone cliffs, fields and farmyards, I considered what she had to say about what being in the world, being part of the world, and being affected by and affecting the world, might mean to me as a visitor to this place.

Barad emphasises that practices of ‘knowing’ and ‘being’ are mutually implicated. ‘We don’t obtain knowledge by standing outside the world; we know because we are part of the world’ (Barad, 2007, p185).¹²² Separating epistemology from ontology is part of a thinking that differentiates between human and non-human, subject and object, mind and body, matter and discourse, but if we are to appreciate the intertwining of ethics, knowing and being, she advises that we need a term like ‘*onto-epistemology*’ to describe the study of practices of ‘knowing in being’ (p334).

Barad began her training in the complex science of quantum field theory. She started to see similarities with some of the existential problems that humanity was grappling with around being human, making knowledge, and how to act justly, introducing new ways of talking about the world, through terms such as *agential realism* - ‘the forces at work in the materialisation of bodies’; *diffraction* - ‘the enactment of boundaries’; *intra-action* - ‘action from within’¹²³. Here the ability to act emerges from within the relationship rather than outside of

¹²² Barad, K. (2007) *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press.

¹²³ Barad, K. (2003) *Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter*

https://www.uio.no/studier/emner/sv/sai/SOSANT4400/v14/pensumliste/barad_posthumanist-performativity.pdf [Accessed 13.05.19]

it, affording a different perspective on how we relate to each other (including non-humans), as well as matter and materials.

‘...It’s not about solving paradoxes or synthesizing different points of view from the outside ... but rather about the intra-implication of putting “oneself”, one’s ideas, one’s dreams, all the different ways of touching, and being in touch, and sensing the differences and entanglements from within.’ (Klein, 2012)¹²⁴

I was in France to draw. My aim had been to focus on practicing ‘blind contour drawing’,¹²⁵ a method where, rather than looking at your work as you draw, you allow only your eyes to observe the subject that in turn guide your hand to express what is observed in a responsive but unjudged mark. I like this method for its ability to defy the analytical mind and create an image that emerges from a more embodied observation. Yet, in this new environment, I did not know quite where to begin. I found the abundance overwhelming; after all, the dense woodlands, emerald fields, and fruit trees dripping with plums and figs are the opposite of the sparse Hebridean landscape I was more used to. How could I take in this exuberance, this brimming over?

The artist studios were based in the disused gendarmerie that had also been the family home of the local policeman. I was struck by one of the rooms (Blue Studio) that was still papered in a beautiful blue floral design that bore so little resemblance to the landscape. I could imagine how this illusion of delicacy and order would offer a satisfying and comfortable refuge from the realities

¹²⁴ Klein, A. (2012). Mousse 34 - Karan Barad *Intra-Actions*. Mousse Magazine (Milan) Interview Published in Special DOCUMENTA (13) Issue of Mousse Magazine (Milan, Italy), Summer 2012 https://www.academia.edu/1857617/_Intra-actions_Interview_of_Karen_Barad_by_Adam_Kleinmann [Accessed 22.09.19]

¹²⁵ A practice introduced by Kimon Nicolaïdes in *The Natural Way to Draw*, where the artist maintains their gaze on the subject as they draw without looking at the marks they have made. He felt that the desire to draw was as fundamental and natural as the desire to talk, and drawing, like talking, was about learning how to do things the right way from the beginning. He felt that drawing well had nothing to do with technique, aesthetics or anything else, only *right observation of the world*. Nicolaïdes, K. (1992) *The Natural Way to Draw* Houghton Mills, Boston

outside, or down below, in the cells. But it also jarred, and I felt I wanted to make a response to the feelings this room had aroused. To be able to do that, I needed first to come to terms with what I was looking at in this lavish milieu. To take a piece; make a frame; effect a 'cut' between what would be included or excluded from consideration; drawing a boundary between what was inside and outside of my focus; finding a way to directly engage with the matter of this place. For Barad, *agential realism* is the physical practice of engagement: 'Scientific practices are specific forms of engagement that make specific phenomena manifest' (p336). Artistic practices are forms also of such engagements, as artists plainly produce phenomena.

'Agential cuts do not mark some absolute separation but a cutting together/apart – 'holding together' of the disparate itself.' (Barad, 2012, p 46)¹²⁶

In an 'agential realist' approach, I came to explore the method of *frottage*, a so called 'automatic' method of drawing developed by Max Ernst,¹²⁷ using pastel or graphite drawing medium in a rubbing motion on thin paper, laid against a surface. The paper conceals the uppermost layer, which extends the state of 'blindness' for the artist until the pastel or graphite draws-out the texture beneath to create an observable, or readable, new surface on the paper. The artist is implicated in this unfolding and entanglement of matter and is active in the reaction of the pastel-on-paper-on-surface through making-yet-not-making the mark. This explicitly shifts the foreground/background qualities of each material constituent of the methodology. Through the specific intra-action of these

¹²⁶ Barad, K. (2012) *Nature's Queer Performativity*. Kvinder Køn og Forskning 1-2: 25-54 https://www.academia.edu/1857572/Natures_Queer_Performativity_the_authorized_version [Accessed 13.05.19]

¹²⁷ Max Ernst (1891-1976) was a German-born painter and pioneer of the Dada and Surrealism movements. "Painting is not for me either decorative amusement, or the plastic invention of felt reality; it must be every time: invention, discovery, revelation." <https://www.theartstory.org/artist-ernst-max.htm> He is said to have invented the technique of 'frottage' that uses rubbings as part of collages to make images that examine the subconscious. https://www.moma.org/learn/moma_learning/max-ernst-levade/ [Accessed online 12.05.19]



Figure 4-1 *Wallpaper Series #22*, 2015, conte, Japanese Gampi 450x610mm, Caylus, France

objects, including my fingers holding the pastel and the paper, together with the gentle pressure I exert on them and hold within my taut body, the drawing emerges from, rather than leads (as in a visualisation) the intra-action that fashioned it.

‘A phenomenon is a specific intra-action of an ‘object’; and the ‘measuring agencies’...[which] emerge from rather than precede, the intra-action that produces them.’ (Barad 2007 p128)

I had performed the *agential cut*¹²⁸ by laying thin sheets of Japanese Gampi paper¹²⁹ down onto the earth, rock, tree, cliff, and recorded the matter before me. Temporarily separating their visual connectedness with everything

¹²⁸ *Agential cut*: ‘enacts determinate boundaries, properties and meanings’ Arlander, A., Barton, B., Dreyer-Lude, M., Spatz, B. (2017) *Performance as Research Knowledge, Methods, Impact*. Arlander, A. (2017) *Agential cuts and performance as research* p 135 Routledge, London

¹²⁹ *Gampi* is a Japanese handmade paper, made with fibres from the inner bark of the gampi bush which is only found in the wild. It is a very translucent paper, with a naturally sized quality which prevents absorption. It weighs around 10gms per sheet (45x61cm).

else. I found I could adjust my method, accommodate the uneven surface, the fragility of the paper, and the powdery composition of the pastel, learning to accept the intrusion when the matter beneath the paper would break through to further inform the process of discovery. This frottage process turns haptic encounter into a visual realm through encounter with the world-as-it-is, using touch to guide what comes to be seen, in counterpoint to the 'pictorial turn'.

4.1.3 The embodied process of drawing

'Seeing, according to Aristotle, is a process whereby the form of an object but not its matter enters into the eye.'¹³⁰ Perhaps 'seeing form' but not 'feeling matter' is partly where the current disjuncture between society and the biosphere materialises. The way we interact with things affects what we know and think about. Have we forgotten that we understand our world through our bodies?

Vision is central to our experience of and interactions with the world around us, but the experience of seeing as if through a frame can lead us to conceive what we see as a representation. Today, the screen dominates and mediates so much of our contemporary looking and reduces 'reality' to what can be represented and enjoyed from a fixed vantage point so we perhaps forget we have bodies that move, and that our perspective changes with each move that we make. My process of drawing does not seek to create pictures of my seeing but is about finding a way to really see what I'm looking at, through a face-to-face, body-to-body encounter with the substance of place.

The essence of drawing is one that involves a cycle of practice, reflection, understanding and repetition, where each stage informs the next. Drawing is 'doing learning'. The landscape is my working space, and is where the work is formed. An entwined relationship of formation and materiality, and at the centre is my own subjective experience. I seek a place of encounter with the freedom to explore that fights the restriction of the frame. I want to get away from walls and windows, floor spaces and doorways, and plunge into the flow of

¹³⁰ Noë, A. *Action in Perception* (2006) Ch. 2, p. 40 MIT Press, Massachusetts

the world around me using my body to embrace the whole experience. I grope my way across surfaces and sink into the soft land beneath my feet, as the environmental conditions insist their way into the work.

The frame is considered essential to representational art as a means to distinguish the object of vision from its spiritual subject, emphasizing the difference between the microcosm of the picture and the macrocosm of the natural world. W. J. T. Mitchell (1994, pp 9-34), contends that contemporary culture is characterized by the ‘pictorial turn’;¹³¹ we live in a world of images, where our technologies of control and representation have speeded up the manufacture of realities. In *Action in Perception* (2006),¹³² the philosopher Alva Noë states that ‘the content of perception is not like the content of a picture’ and proposes ‘to perceive is not merely to have sensation, or to receive sensory impressions, it is to have sensations that one understands’ (Noë, 2006, p33). He



Figure 4-2 Studio installation: *Wallpaper Series #1-24, 2015*, Caylus France

¹³¹ Mitchell, W.T.J. (1994) *Picture Theory: Essays on Verbal and Visual Representation*. Ch. 1 ‘The Pictorial Turn’ Chicago: University Press.

¹³² ibid Noë, A. (2006)

identifies these forms of understanding as falling into two overlapping categories of sensorimotor and conceptual understanding, arguing the need to develop our sense of what we see through our ability to access detail via our sensorimotor skill. So that in order to fully understand we must take ourselves to the actual places, and to see, feel and experience, for ourselves.

But this is not always as easy as it sounds. As J. A. Baker observed ‘The hardest thing of all to see is what is really there’ (Baker, 1967). He wrote *The Peregrine*¹³³ as a result of spending 10 years observing peregrine falcons in the rural landscape of Essex. This ardent period of surveillance is compressed into a brief manuscript of diary format that traverses the winter of one calendar year. Robert Macfarlane describes his writing style as ‘a kind of augmented-reality visor ... [due to] impossible precisions of seeing and movement’.¹³⁴ The text’s magnified imagery of the bird’s domination of its territory belies the writer’s own wish to escape his boundedness to the earth. At the end of his pursuit though, a confrontation arises through the developing ease between the wild bird and the watcher, which does not result in coalition but in a mutual detachment and demonstration of indifference, illustrating the division existing between species.

The hawk is only five yards away. He sees me at once. He does not fly ... I keep still, hoping he will relax, and accept my predatory shape that bulks against the sky ... Swiftly now he is resigning his savagery to the night ... The great eyes look into mine... I climb over the wall and stand before him. And he sleeps. (Baker, p 160)

¹³³ Baker, J. A. (1967) *The Peregrine* Penguin Books UK

¹³⁴ MacFarlane, R. (2017) *Violent spring: The nature book that predicted the future* <https://www.theguardian.com/books/2017/apr/15/the-peregrine-by-ja-baker-nature-writing> [accessed 09.04.2018]

Our relentless scrutiny of a subject will not necessarily reward us in the way we might have intended. The immediacy of our subject presents us also with its impossible distance. However, once aware of this paradox, it is in this humbled state that understanding has the potential to grow. I follow my instinct and stop to make a drawing. What is it that attracted me? What did I see? Looking at it as a space, so often it seems quite unpromising, but I stop, and lay down the paper, and start to draw. What will be revealed is what was already there – in plain sight, yet unnoticed. The drawing *acts* across the human and non-human divide, *within* the collaboration of seeing, making, material and thinking, and began as I walked along, then decided to stop. These pieces were not composed but instigated by an unheard calling of matter, an unplanned intra-action that had registered subconsciously. ‘Seeing the substance’ through direct touch between materials and place, began with a blind engagement, and was followed by a ‘coming to see’ as the drawing emerged. I think too often we repeat ways of working as a definition of skill and knowledge, but as a stranger here, finding new marks and new ways of making helped me to see this place: to gain a sense of place I needed only to lay my paper down and begin rubbing.



Figure 4-3 *You are not outside*, 2016, frottage dress, ‘Blue Studio’, Gendarmerie, Caylus France

Yet, it is uncomfortable working like this – half way up a cliff or beneath the trees, balancing. Barad talks about developing a relationship where you are not in charge. "... a matter of inviting, welcoming, and enabling the response of the Other."¹³⁵ I am not leading. I just take a step forward and discover what can be revealed beneath my fingertips, responding further, as I drive the charcoal, graphite or pastel across the paper. Sometimes something pokes through, interrupting me. I discover then how something insignificant and unseen like a little twig could form hard lines across the work. The pastel would pick up the presence of the twig and make a clear smooth line. Yet, another time, it would instead make holes. And then I would realise that the benign little twig had thorns and had formed a series of little tears in the paper, marking its presence in the work and in the world. The beginnings of a dialogue that started with laying the paper down and making a mark: a mark, which simultaneously creates and reveals followed by the revelation that comes from that act, to make the marks that can be made with the surfaces that are there.

My drawings co-enact ways of making as a means to investigate and document ideas of collaboration. Based on physical marks, the creation of these frottage works involves an intention to 'make with' and 'think with' matter and beings, acknowledging the elements of co-creation in a system of collective production. As I complete the drawing and separate it from the surface it has become a *relic*, documenting the activity and preserving the ephemeral presence of the collaboration. It evidences the dialogue that occurred face-to-face between human and non-human, matter and being, where knowledge was gained, experienced and shaped in the process.

¹³⁵ *ibid* Klein, A.



Figure 4-4 *Okuti Valley Reserve Series #1-10*, 2016, NZ, Conte, Mulberry paper 720x480mm

4.1.4 Creating a studio space for community placemaking

A place owes its character to the experiences it affords to those who spend time there – to the sights, sounds and smells that constitute its special ambiance. And these, in turn, depend on the kinds of activities in which its inhabitants engage. It is from this relational context of people's engagement with the world, in the business of dwelling, that each place draws its unique significance (Ingold, 1993, p 155)¹³⁶

Since cultures are grounded in histories that evolve over time the way we understand what people do at any point must be viewed in light of historical trajectories, and in particular sited situations. How people behave is shaped by and draws upon their cultural values and resources. My interests lie in exposing the community's understanding of each other, the topography of their land, soils and climate, and its potential to sustain shared livelihoods, both now and in the future, if managed effectively. 'Placemaking shows people just how powerful their collective vision can be.'¹³⁷

I am, among other things, an artist who makes work in response to the place where I stay and the people I live with, in the evolving field of co-production. I was drawn to develop this line of enquiry partly because of the currently perceived lack of appreciation or validation of the community's implicit knowledge of its own circumstances, threats to its continued survival, and a desire to seek possible solutions as to how to foreground them in a way that does not risk appropriation, by either myself or others, but instead highlights their collective wisdom and benefit. Once I was an outsider, but time and chance opened up a space for me in Uist, and the process of my staying in this place affected changes to it, but also changed me. Through my contributions of

¹³⁶ Ingold, T. (1993) *The Temporality of the Landscape* World Archaeology Vol 25 No 2 Conceptions of Time and Ancient Society. Routledge
<https://quote.ucsd.edu/sed/files/2014/09/Ingold-Temporality-of-the-Landscape.pdf>
[Accessed 20.10.17]

¹³⁷ Project for Public Spaces *What is Place-making?* <https://www.pps.org/article/what-is-placemaking> [Accessed 24.09.19]

creating a family, running a plant nursery,¹³⁸ studying, co-designing and co-leading creative community projects there, as well as volunteering in various capacities, I have substantiated my existence, and deepened my knowledge of this place and its people. And in dialogue with landscape, through the intertwining of processes dwelling-in-and-with all the other persons and things across this period of time, my relationship to place and others has also deepened.

The engagement projects I have developed, which will be detailed in the following chapter, take place within site-specific, integrated working spaces that aim to develop horizontal relationships that encompass all levels of human and non-human others. People get involved for a variety of reasons and in several contexts, but each begin by accepting an invitation to take part. This approach affords individuals the freedom to respond to a collective call, whether they are strangers or acquaintances, self-nominated or organisation-led, which results in an expression of human desire to work towards the collective goal of achieving a positive and communal outcome. This approach creates spaces of possibility, and can be likened to an artist's studio:

‘a workshop to transform materials that at first glance may not seem all that special ... into statements that have the power to move hearts, change minds and influence society’¹³⁹

At the present time, a problem for eco-social artists has been in gaining recognition for their praxes, which strive to foster new values and visions for human relational understanding of the biosphere.¹⁴⁰ It is important to increase

¹³⁸ From 1993-2008, I ran Keske Nurseries: *Plant for Windy Places*, from my home in North Uist, where I grew approx. 20,000 garden and food plants per annum for sale to the local community.

¹³⁹ AMFAB (2018) *In Community: Understanding the Role of an Artist's Studio Space* <http://amfabarts.com/blog2/2018/4/27/in-community-understanding-the-role-of-an-artists-studio-space> [Accessed 19.04.19]

¹⁴⁰ London dealer Kate MacGarry acknowledged environmental art is not good business. “Environmental art has always had this didactic stigma,” she says. “It’s a bit of a minefield. I didn’t show it this year, because I also don’t want to use it as a marketing tool. But in general, it is not a go-to theme right now, though I wish it was.” Brown, K. (2019) ‘Everyone at a Place Like Art Basel Is Complicit’: Artists May Be Making Art

awareness of this type of arts practice that de-emphasises the exclusivity of art, in favour of 'ensemble' practices (a concept developed by Iain Biggs), hybridising artists' ways of seeing and making through collective eco-social approaches to community engendered outcomes. These encompass the polemics and issues experienced in society during this time of ecological crisis, where the concept of the social view forwarded in the work can be conveyed and internalised individually and in relation to each other. What these practices fight against is the primacy of an arts culture that prizes the hyper-individual artist as creativity owner, and instead focusses on the potential to be found in an open engagement with the multiple, entangled, interconnected, and interdependent collective whole.

4.1.5 How 'ensemble practices' facilitate eco-social sustainability

This manner of encountering the world, both individually and collectively, allows time and space to affect thinking, reflection and potential actions, echoing shared experiences and evolving knowledges. We all walk in the paths made by others, but in using those paths, we also modify them, not least by our physical presence but also through the changes we affect. *Placemaking* is a collaborative activity through which we shape our public realm to amplify shared value. It enables creative patterns of use, and pays attention to the physical, cultural and social identities that define a place and support its ongoing evolution. The reverberations of practice, critical thinking and deep spaces for reflection find unique form of expression when working in these ways with society and environment. Artists with 'ensemble practices', get involved in the shaping of place through the creative projects they devise. These happen in the normal business of life, yet deliver conscious aesthetic experiences that coalesce relationships with various animate and inanimate agents participating in equivalent processes, through 'knowing in being' (Barad).

About Climate Change, But Nobody at the Fair Wants to Talk About It.
<https://news.artnet.com/market/art-basel-climate-change-1571881> [Accessed 02.08.19]

Eco-social artistic approaches benefit the communities they serve by advocating for community knowledge and practices to be included in project design and delivery. This helps to disseminate important skills and practices, but also fosters the community's confidence in their own knowledge, further supporting and advancing the collective voice. Additionally, this practice enables new artistic approaches to be tested, as a means to consciously examine the function and meaning of art in society. By acting as conduits, catalysts, or activators eco-social artists can help to highlight important community and environmental knowledge and generate a more inclusive approach to addressing societal issues, including growing awareness of climate change, and thereby expanding the potential of what art can do.

In the next chapter, I will introduce the series of Climate Challenge Fund projects I was involved in developing and delivering, laying out the intentions, process and outcomes of this 3-year mission to co-develop community engagement and Climate Literacy skills with the community on Uist.

Chapter 5: Deploying Community Embodied Knowledge

This chapter is a distillation of the Climate Challenge Fund food-growing projects I co-designed and co-led with local organisations, Taghsa Uibhist and Cothrom Ltd, and the community in Uist. This series of projects initiated the concept and subsequent development of each *Grow Your Own Community* food growing hub (6), establishing each site as an integrated working space that reflected each groups' demographic. Here, the application of a modified Participatory Action Research (PAR) process that abstracts from Kaupapa Māori Theory (KMT), described earlier, had the effect of empowering co-participants, both personally and collectively, to act on reducing locally generated CO₂e emissions. Through a process of modifying goals and decision-making in the light of experience, this approach helped to motivate social-thinking and action on a range of local environmental and societal issues. It assisted Uist communities to discover and consider how to act on, rather than ignore or evade, the sort of hard to resolve issues that climate change raises locally.

5.1 Strand 7: How can community embodied knowledge be deployed for the benefit of the community and organisations concerned with climate change?

5.1.1 Addressing Climate Change with Communities

Even though solid, scientifically proven evidence reinforces a general acceptance that people are causing Earth's climate to change, it remains a complicated and antagonistic issue for the public to engage with.¹⁴¹ Data, showing how natural

¹⁴¹ Higgins, P. (2014) *How to deal with Climate Change* Physics Today 67, 10, 32
<https://physicstoday.scitation.org/doi/full/10.1063/PT.3.2548> [Accessed 06.06.19]

influences, such as from the sun and volcanoes,¹⁴² have also contributed to the increased temperatures, can cloud judgement over the much greater human contribution made through industrialisation and significant human lifestyle changes during the last one hundred years. Simply put, we are consuming too much and polluting too much. Economic growth cannot keep increasing as it is causing irreversible damage to the Earth, and the natural systems upon which we depend for survival, namely soil, water, and air.

Despite how in *Limits to Growth* (1972), Donella Meadows et al, demonstrated that unchecked growth on our finite planet was leading the Earth towards ecological ‘overshoot’ and pending disaster,¹⁴³ the unpredictability of precisely how climate change will affect us allows some sections of society to be blasé. They think that either the consequences may not be so challenging, or that they can be outrun, simply by moving to places that, according to current estimation, will be less affected.¹⁴⁴ For rural communities such as those in the Outer Hebrides, however, these options are no longer possible. Firstly, the effects of climate change are already being experienced in the form of sea level rise, coastal erosion, and rising temperatures causing more frequent weather events.¹⁴⁵ Secondly, while there is some conflicting debate over population trends, where a local survey on young returnees¹⁴⁶ contradicts local authority

¹⁴² The Royal Society (2019) Climate Change: Evidences and Causes <https://royalsociety.org/topics-policy/projects/climate-change-evidence-causes/basics-of-climate-change/> [Accessed 27.07.19]

¹⁴³ Meadows, D., Randers, J., Meadows, M. (2006) *Limits to Growth: The 30-Year Update* Chapter 1 ‘Overshoot’. James & James Ltd, Bath, UK

¹⁴⁴ Milman, O. (2018) *Americans: the next climate migrants Where should you move to save yourself from climate change?* The Guardian <https://www.theguardian.com/environment/2018/sep/24/climate-change-where-to-move-us-avoid-floods-hurricanes> [Accessed 06.06.19]

¹⁴⁵ Angus, S. & Hanson J.D. (2004) Tir A'mhachair, Tir Nan Loch? Climate Change Scenarios for Scottish Machair Systems: A Wetter Future? https://www.researchgate.net/publication/268016300_Tir_A'mhachair_Tir_Nan_Loch_Climate_Change_Scenarios_for_Scottish_Machair_Systems_a_Wetter_Future [Accessed 27.07.19]

¹⁴⁶ Downey, H. (2018) *Young people turning the tide of island de-population trends* <https://www.ruralnetwork.scot/news-and-events/news/young-people-turning-tide-island-de-population-trends> [Accessed 06.06.19]

estimates¹⁴⁷ that the population is declining, and aging, for the most part, communities on the islands are staying where they are. The lives and futures of the inhabitants are embedded in each other as much in the fabric of the environment. So how might these communities best address the impacts that climate change will have on their lives?

Throughout this text I am using the acronym CO₂e, which stands for ‘carbon dioxide equivalent’: a conventional ‘climate change metric’ that takes all the greenhouse gases causing climate change and expresses carbon footprint¹⁴⁸ in the less complex terms of their equivalence to the amount of carbon dioxide that would have the same impact. It is a standard unit for measurement of carbon footprint, which is a metaphor that has been adopted to estimate the total impact that activities, lifestyles, goods and services have on the changing climate. Man-made climate change is caused by the release of different gases into the atmosphere. The dominant gas that is produced through burning fossil fuels is Carbon Dioxide (CO₂). However, Methane (CH₄), is also emitted in agricultural practices and from landfill sites but is 25 times more potent per kilogram than CO₂. Nitrous oxide (N₂O), is released from industrial and farming processes, and is 300 times more potent, while refrigeration gases, such as chlorofluorocarbons, are several thousand times more potent than CO₂.

If community organisations exist as structures to stabilise and strengthen community agency,¹⁴⁹ then the destabilisation that climate change promises necessitates urgent identification of appropriate actions and platforms for such organisations to engage in. From my perspective, these need ideally to include creative platforms, as I think these are best placed to present a distinct

¹⁴⁷ Comhairle nan Eilean Siar Outer Hebrides *Fact File: Population Overview* (2018) <https://www.cne-siar.gov.uk/strategy-performance-and-research/outer-hebrides-factfile/population/overview/> [Accessed 06.06.19]

¹⁴⁸ Berners-Lee, M. & Clark, D. (2010) *What is carbon footprint?* <https://www.theguardian.com/environment/blog/2010/jun/04/carbon-footprint-definition> [Accessed 06.06.19]

¹⁴⁹ Weinstein, J.N., Geller, A., Negussie, Y., Baci, A. (Eds) (2017) *Communities in Action: Pathways to Health Equity Policies to Support Community Action*. National Academies Press, Washington, DC <https://www.nap.edu/catalog/24624/communities-in-action-pathways-to-health-equity> [Accessed 12.07.19]

framework of inquiry that enables observation, activation, and analysis within the shared values and experiences of collective embodied knowledge; and, additionally, are capable of provoking and propagating community transformation.

Art as *social sculpture* can be understood as a transdisciplinary collaboration to connect people with difficult-to-solve ecological and societal issues, through the building of art projects that communities can augment, and also be transformed by. In the 1970s, Joseph Beuys developed the theory of *social sculpture* as a connective practice between artists, activists, organisations and the public to evolve environmental awareness through participation, dialogue and collaboration.¹⁵⁰ My artistic practice focusses on reactivating within people an awareness of valuable knowledges and skills that they already hold, using an approach discussed by Corradi Fiumara (1995 pp 143-168), known as the *Maientic Method*, which, through reasoning and dialogue, brings a person's latent ideas into clear consciousness.¹⁵¹ The eco-social art methodologies I employ, center on using the community's underlying tacit knowledges and skills to develop climate literacy via social and intergenerational activities. In this case, these have led to the establishment of community food growing hubs across a wide geographical area in Uist, that were achieved collaboratively through planned actions, shared vision, co-intelligence and co-management strategies.

While, major changes involving sea-level rise are largely outside of the community's immediate ability to address, concerns around food production, food quality, food miles, and food security, are well within the bounds of such a group's capacity, particularly where the skills, knowledge and experience to produce food locally are still held within that community. The intention behind the series of Uist-based Climate Challenge Fund projects, was to work with the existing knowledges, lived-experiences and intersubjectivities of the community,

¹⁵⁰ See Social Sculpture Research Unit <https://www.social-sculpture.org/> [Accessed 04.06.19]

¹⁵¹ See Gemma Corradi Fiumara's Chapter on 'Midwifery and Philosophy' in *The Other Side of Language: A philosophy of listening* pp 143-168

to deliver a programme of activities with a target of CO₂e emissions reductions linked to the revival of local food production and development of Climate Literacy in the population.

5.1.2 Grow Your Own Community: Building a Case Study

Collective embodied knowledge about environmental sustainability is slowly eroded with the ever-increasing modernisation of rural communities. On these islands, an increased reliance upon technology has led to the non-crofting community becoming disassociated from much of the surrounding rural environment, and intensified contemporary social, economic and ecological challenges. The *Grow Your Own Community* project set out to mediate this loss by delivering a creative strategy that would harness the crofting community's embodied knowledge as the central critical axis to engage people in the development of climate literacy across the islands' population, and to underpin a more sustainable future. The project sought to gather and disseminate this knowledge and its potential uses, as well as test out ways in which co-creative artistic practices can help to further its expression.



Figure 5-1 Bornish Community Polycrub group

A community's embodied knowledge develops through its approach to change. While changes come about in all societies — through alterations in the population demographics, economic fluctuations, government policy changes, access to healthcare and schools' provision, and not least, climatic instability — tiny communities such as those in the Uists feel these changes much more acutely. The evacuation of the neighbouring islands of St Kilda in 1930 due to an unsustainable decline in population,¹⁵² is one such case that delivers a blunt reminder of the impact that such changes can eventually have in rendering a whole community's way of life defunct. Despite such threats, a willingness and ability to adapt and respond to change produces resilient people who retain the potential to transition their lives when they need to. This inherent capacity is central to my research aims, which centre on identifying how community embodied knowledge can be recovered as a means to engage participants in understanding how the specific set of knowledges they have accumulated through lived experience, and through intergenerational distribution, can be a vital resource in the ongoing fight to sustain their own communities. Furthermore, this knowledge may be deployed in such a way as to improve the means by which ecological and social regeneration are achieved.

5.1.2.1 Local Food for Local People CCF-3812

Starting in April 2015, *Local Food for Local People (CCF-3812)* was the first in a series of food-growing projects taking place on the Uists from 2015-2018, funded through the Scottish Government's Climate Challenge Fund. It was administered by local community organisations, Tagasa Uibhist and Cothrom, to help develop a low carbon future for the Uist community. It set out to reduce CO₂e produced through buying food from local supermarkets by 18.5 tonnes a year, by

¹⁵² The evacuation of St Kilda in 1930
https://www.kilda.org.uk/evacuation.htm#.XPmDyNNKg_U [Accessed 06.06.19]



Figure 5-2 Involving school pupils in dialogue Photo Credit: S Macdonald

encouraging the growing of more local produce to reduce food miles, reduce food waste and raise awareness of their links to sustainability and climate change. Additionally, it would provide opportunities for skills development and work experience in the horticulture sector to deliver health and wellbeing benefits, as well as employment opportunities.

The main aim was to achieve an increased level of locally grown food throughout the islands, supported by a programme of workshops and literature that would lead to food waste reduction. During a particularly poor growing season, where low summer temperatures were exacerbated by predominantly cloudy conditions, cold winds and excessive rain, it was satisfying to report that CO₂e reduction targets were surpassed for all the project sites. This was partly due to the actual rate of production per m² (based on produce grown at the main community allotment site) being significantly higher than estimated: 4.43kg/m² rather than 3.1kg/m². Also, a much greater number of 'Food Waste Reduction Workshops' were held for a larger number of people than originally estimated (27 workshops were delivered to 511 people, rather than the estimated 12 workshops to 84 people). These workshops for adults and school pupils, were designed to

encourage interest in growing and preparing freshly picked food, backed-up by teaching good composting practices.

The ‘Growing Community’ was supported through various initiatives including the development of allotments at various publicly accessible sites, which afforded much needed growing space for 45 residents in the Balivanich and Daliburgh areas, many from social housing schemes. Site users received additional support through the guidance of Horticultural Coordinators and volunteers who provided a weekly service of site management, including grounds care, plot management, seasonal provision of manure, seaweed and compost, as well as ongoing general horticultural support and advice.

Baseline data was gathered during October 2015, on the current level of horticultural land use through the *Reclaiming the Knowledge Survey*, which was developed by Geography Higher pupils at Sgoil Lionacleit (the islands only High School) as part of an assignment in understanding land-use. In *Landmarks*, Robert Macfarlane wrote about how in the 1930’s school children were recruited as ‘crowd-cartographers’ to map how their local countryside was being used as a contribution towards data that revealed patterns of national land use (Macfarlane 2015, p324). For the growing project on Uist, I decided to employ this approach as an engagement strategy with all the island schools. In the island-wide initiative, school pupils were trained as ‘crowd cartographers’ and designed the survey as a school assignment, before setting out to gather details of garden and croft vegetable production happening across the islands’ townships and communities. For this part of the project, school pupils took survey sheets home to gather information from their families and neighbours about the current areas of land under production; details about soil type, and crops grown; and workforce demographics.

The collected data revealed that at least 20% of all households throughout Uist were successfully growing some form of soft fruit and vegetables for home use, on an area of 4.3 hectares, and on a variety of soil types, in various systems - from raised beds, machair sites and in protected growing facilities, such as greenhouses and polytunnels. This data was eventually brought

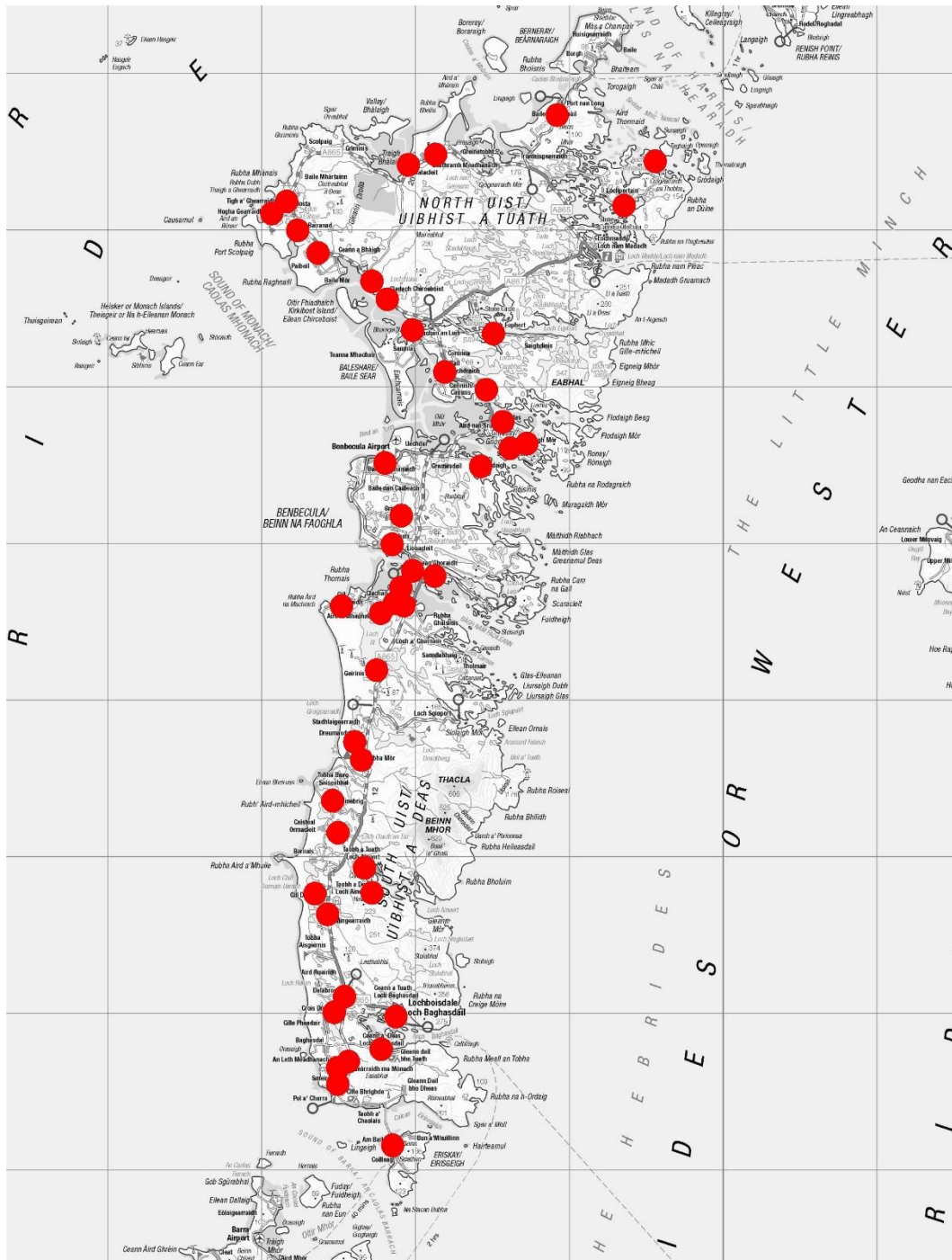


Figure 5-3 Survey Map identifying locations of food growing activity Oct 2015

together in *The Uist Growers Almanac*¹⁵³ as a repository of local knowledge on growing fruit and vegetables successfully, in the harsh landscape of Uist, using locally available manures and seaweed. The publication contributed towards engendering the possibility of a return to home-grown produce through the sharing of practices that help towards achieving more sustainable production that could directly improve the island community's diet, afford a healthy and productive activity for its growers, and decrease reliance on supermarkets for fresh food.

Out of the 500 Uist households surveyed, 109 reported they were currently growing some form of vegetables and fruit. The total area of production amounted to 44,309m², and of that 9,527m² was on land that was producing food for the first time. In addition to the other information in the survey, 64 respondents passed on valuable growing advice and cooking recipes. This survey data revealed that the actual area of new community production, based on growing activity across the islands during 2015, was 27% higher than originally estimated in the project's design. As a result of this information, and due to the higher than estimated production rate per m², the annual CO₂e reduction target rate of 18.5 tonnes was surpassed and estimated to be nearer an annual CO₂e reduction rate of 65 tonnes. While the merits of this carbon footprint calculation could be further debated, and in successive project iterations calculations certainly did become more sophisticated and verifiable,¹⁵⁴ it is important to recognise the need to gather clear and dependable baseline data that most accurately reflects the situation on the ground. This is important both for the community, because it shows that their actions are properly recognised, and

¹⁵³ Donkers, L. (2016) *The Uist Growers Almanac the natural way to grow* Elite Publishing Academy UK. Also accessible as an e-book on ISSUU https://issuu.com/localfoodforlocalpeople/docs/the_uist_growers_almanac_the_natural_way_to_grow [Accessed 09.06.19]

¹⁵⁴ Climate Challenge Fund have published a Carbon Literacy Guide (2018) where they set out clear information on terms such as *carbon footprint*, *embodied carbon*, and how *Greenhouse Gases* (GHG) are measured. There is also a section on 'Calculating carbon emissions from our actions' (p. 10-12), and 'How to reduce CO₂e emissions' (p. 13-15). <https://www.keepsotlandbeautiful.org/media/1561746/climate-literacy-guide-part-3-intro-final-low-res-180618.pdf> [Accessed 19.09.19]

for community organisations, as good data enables them to correctly target their work and funds in the areas of most need, rather than delivering outcomes that risk denigrating and alienating the very contributors they could be engaging with.

The inclusion of young residents to harvest this data from their own community, along with respondent's willingness to divulge accurate information, went a long way towards the production of solid data. This enabled the sensible targeting of areas for future project expansion and training development, and highlighted also, the mutual interdependence between community members, organisations and funders on the delivery of relevant and effective community projects.

I have been involved to a greater or lesser degree over the past 15 years in advising and supporting initiatives which have been aimed at encouraging growing more local produce...this project – partly as a result of its learning from other past initiatives – has the potential to bring significant change in our communities' attitude, habits and cultures in relation to local produce, growing and consumption. It's significant successes to date have resulted from the connection it has made between a wide diversity of local communities, both geographically and across the generations, and links to learning, and the wider issues of sustainability and climate change.

Marie Campbell, Regeneration Officer, Comhairle nan Eilean Siar¹⁵⁵

¹⁵⁵ Donkers, L. (2016) *Final Report Local Food for Local People CCF-3812* Executive Summary p4.
https://issuu.com/localfoodforlocalpeople/docs/final_project_report_ccf-3812
[Accessed 09.06.19]



Figure 5-4 A Uist grower's garden

5.1.2.2 Local Food for Local People CCF-4744

Data from the *Reclaiming the Knowledge Survey* revealed that over 90% of current growing in Uist is carried out by over 35-year-olds. In addition to the core activities of increasing food production, composting of commercial food waste, and provision of support to enable people to improve their climate literacy, the

project's second iteration, *Local Food for Local People* (CCF-4744),¹⁵⁶ also encouraged a greater number of young people to become involved in growing food and eating better. This new aspect sought to prioritise training and allotment facilities for young families, as well as developing 'Life Skills' through schools-based and Adult Learning-based workshops. This workshop programme included cooking from scratch, meal planning using seasonal produce available from our allotment sites, and guidance on how to reduce or even avoid food waste. Information and a visual exercise in calculating the amount of material waste from vegetable preparation took place with Home Economics pupils at Sgoil Lionacleit. This exercise involved: supply of fresh vegetables from the allotments; weighing of the vegetables prior to preparing for cooking; followed by weighing the waste produced. This approach expanded understanding of the need to keep food waste out of residual rubbish bins destined for landfill sites, and instead become a component of 'home compost'.¹⁵⁷ The pupils visited the nearby allotments to see the produce growing, learned about 'seasonality',¹⁵⁸ and carried out cooking and meal planning activities that took these factors into account.

Local Food for Local People (CCF-4744) also sought to raise awareness of biodiversity and its links to sustainable food production. This was done by introducing the *Sowing Wildflowers* project to 12-25-year-olds as a GROW WILD Community Project,¹⁵⁹ as well as launching *Potatoes for Schools*, as a method to establish whether there was capacity amongst crofters to grow and supply extra potatoes to the islands' schools. Also, the pilot *Grow Your Own Community* food-

¹⁵⁶ Donkers, L. (2017) *Final Report Local Food for Local People CCF-4744* Executive Summary https://issuu.com/localfoodforlocalpeople/docs/local_food_for_local_people_ccf-474 [Accessed 09.06.19]

¹⁵⁷ 'Home composting is the most environmentally-friendly way of dealing with kitchen and garden waste, plus it produces compost that can be used as an excellent soil improver.' <https://www.rhs.org.uk/advice/Profile?pid=444> [Accessed 22.09.19]

¹⁵⁸ Seasonality Table <https://www.bbcgoodfood.com/seasonal-calendar/all> [Accessed 22.09.19]

¹⁵⁹ GROW WILD Royal Botanic Gardens, Kew. *Sowing Wildflowers* project photographs and project outcomes data can be found at this link <https://www.growwilduk.com/community-projects/sewing-wildflowers> [Accessed 19.09.19]

growing hub was launched, to ascertain the likelihood of establishing a more self-sustaining model of communal growing centres that could be initiated and run by a collaboration of mutually supportive growers.



Figure 5-5 Project photographs, botanical and insect drawings presented in petri dishes as part of *Sewing Wildflowers* exhibition 2016

Sewing Wildflowers aimed to transform the appearance, character and biodiversity of a brownfield site, converted into community allotments by Taga Uibhist. This was a creative project that set out to replant the site with native plant species through the engagement of Sgoil Lionacleit High School pupils, as well as members of the resident Riding Stables Youth group, and An Caladh Youth Cafe (14-18 year-old Youth Group), who learned about the importance of biodiversity to food production by taking part in onsite propagation, planting and maintenance of wildflowers. This 6-month project tackled issues such as health and wellbeing, and youth disengagement from environmental awareness. It delivered a programme of workshops on Outer Hebridean native plants by local experts in native flora and local bee species, and by teaching horticultural production and care of plants; knowledge of local biodiversity species, particularly Hebridean bees and their importance to local food production; creative engagement with biodiversity and food production through botanical

and insect drawing classes, contemporary sewing and hand-stitching classes; as well as delivering a series of expert-led wildflower walks.

Potatoes for Schools was a strategy to encourage the increased consumption of traditionally-grown ‘Machair Potatoes’. This opportunity was generated following a commitment from local authority, Comhairle nan Eilean Siar (CnES), to support the initiative ‘Better Eating, Better Learning’¹⁶⁰ and provided an opportunity to encourage local growers and crofters to supply the island schools’ catering departments with local produce. This Scottish Government initiative set out a plan to develop partnerships between schools, food producers and suppliers to improve school food and food education. It provided a new context within the schools’ canteen system of uniting the health and wellbeing of young people through better food provision, with transformational thinking on food production methods and healthier food choices. This pilot project delivered a commitment to directly reduce food miles on canteen produce, as well as an opportunity to introduce pupils to ‘machair-grown’ potatoes.

The highly prized ‘Machair Potato’ is grown using the traditional system of planting on the sandy, arable ground near to the shore, known as ‘Machair’, using copious amounts of locally gathered seaweed as fertilizer. This practice gives the potatoes their rich flavour and leaves them with a drier texture that is particularly favoured locally. A promotional campaign through local TV, radio and newspapers gained the support of crofters who agreed to supply the project with potatoes. School catering staff were advised of the purpose of the project and informed about how they could make their orders. To further reduce the carbon footprint of the produce, all potatoes were delivered to schools via the Taga Uibhist Community Bus service, as part of its regular routes. The project featured in a BBC video for ‘An La’ (Gaelic New Programme) and included interviews with local crofters, catering staff and a local councillor.

¹⁶⁰ Scottish Government (2014) *Better eating, better learning: a new context for school food* <https://www.gov.scot/publications/better-eating-better-learning-new-context-school-food/> [Accessed 10.06.19]

The pilot project to supply Machair-grown potatoes to all Uist schools under the 'Better Eating, Better Learning' initiative ... has been a great success. One of the aims of our Whole School Food Policy is to explore the provenance of our food and to encourage the use of fresh seasonal, local and sustainable ingredients. This project has ticked all these boxes, ... *Local Food for Local People*, has been able to source, supply and deliver Machair-grown potatoes to each school weekly through the islands. Our cooks have been able to discuss ... what their requirements are and have been able to ensure that on their menus we can prove the sustainability and provenance of our potatoes. The Catering Department are hopeful that this project will continue in the future. Mairi Boyle, Assistant Operations Manager, Education and Children's Services Department CnES

5.1.2.3 *Grow Your Own Community*

My focus has been on identifying, through several lenses, evidence of community embodied knowledge as a means to engage participants in understanding that their specific set of knowledges accumulated through their own lived experience, and through intergenerational distribution, are a valuable resource to their communities. Furthermore, this knowledge can be deployed in such a way as to improve the means by which ecological and social regeneration are achieved and sustained.

To illuminate the ecological and social relationships of people to their environment, participants needed to be actively involved in the unfolding process of creating and gathering data that would provide the necessary evidence of people's inherent relationship to their own knowledge, to each other, and to the natural environment. *Co-creative participation* was achieved in these projects through several approaches centring on the identification of spaces for people to come together to generate and take part in activities that developed ecological and social conversations. For this project to achieve its goals on CO₂e reductions, the requirement for public participation was crucial. So how its participant groups could be attracted into taking part would be led largely by the intentions

underlying the project's design. Here, the development of communal understanding on locally relevant climate change impacts, was the goal. This key work took place with six groups of residents in their own localities, where communal food growing hubs were developed. The purpose of these was to introduce a basic level of Climate Literacy at a community level by addressing several issues including lack of access to local, fresh fruit and vegetables; poor public transport networks that exacerbated social and geographical isolation; and, dwindling opportunities for daily social interaction and physical activity. In this respectful, shared space I was able to navigate the terrain of community relations to create integrated working spaces where the food growing projects could be developed in a mutually supportive way that reflected each locality's demographic and drew from the collective embodied knowledges of each group. For example, Site 1 consisted mainly of incomers;¹⁶¹ Site 2 attracted mainly male participants; Site 3 comprised mostly of young families; Site 4 attracted an intergenerational group of islanders; Site 5 was mainly retired people; and, Site 6 was a mixed, intergenerational group.

The *Grow Your Own Community* projects were designed to strengthen social cohesion and develop a low carbon future for Uist by providing young families and social housing residents with low carbon community growing facilities, supported by a climate literacy training, and a practical community workshop programme on the use of local waste materials for food growing purposes. These projects set out to stimulate eco-social intra-actions across communities to tackle contemporary loss of connection to environment, and initiate practical ways to reengage, in this instance, through growing food. The projects were co-designed and co-delivered through an ongoing process of collaboration. They rekindled understanding of the importance of traditional social community practices, such as working together and use of local resources, as a cultural starting point acknowledging the relationship that exists between

¹⁶¹ The term 'incomers' is used here to describe an immigrant or newcomer to the myriad of small townships (approx.15-30 inhabitants) that comprise mostly of the Outer Hebridean Island's indigenous population.

humanity and the environment, developing climate literacy as a contribution towards developing a more regenerative future. These endeavours are located within co-creative artistic practices, and are useful to assist society in transitioning towards a more creative form of daily life that is sensitive to the threat of climate change.

5.1.2.4 Community Polycrubs as a place for Climate Conversations¹⁶²

Support workers reported on the ways that they had approached discussing Climate Change with their growers throughout the year:

I attended the session on Climate Literacy training, it has made me more aware of the issues that affect our everyday lives, and we support each other on matters relating to the polycrub for example the use of seaweed...

We have had some conversations about climate change and people now take note of the distance some of the food we eat travels, so we hope to be able to supply our group with enough veg and perhaps be able to share it with some of the elderly in our community

The Climate literacy training was useful. The group is already fairly environmentally aware, and the training made it easier to turn the conversation to environmental issues.

Climate conversations have usually arisen spontaneously, in the course of conversation in the Polycrub. Some conversations were on a global level focusing on ice caps melting, and on political effects of changing weather patterns and food availability perhaps leading to mass migration; and on a local level such as changes to the coastline, and

¹⁶² Extracted from Donkers, L. (2018) *Grow Your Own Community CCF-4968 Final Report*, p 30 <https://issuu.com/growyourowncommunity> [Accessed 06.06.19]

increasing storms. Everyone feels a bit powerless in the face of the global situation but then it gets talked about what we can do on a personal level. We talk about food miles and growing our own food where we can but also about other small changes we can make, like walking to nearby places, rather than take the car and changing to LED bulbs.

Community Polycrub Support Workers

The Polycrub sites were identified through a ‘Call for Expressions of Interest’ that was launched in local newspapers. This register of interest offered Uist residents the chance to grow food for themselves in protected growing facilities called ‘Polycrubs’.¹⁶³ The creation of these spaces acted as a catalyst for eco-social change and community coalition building, rekindling a sense of place, stewardship and public participation. These projects established the premise that communities were more than capable of responding to calls to become involved in food growing activities that required them to work collaboratively, and take up pivotal roles in locating suitable land to grow on, and securing its provision through negotiating with the site owner to agree terms for its use. They were also responsible for the formation of the group according to the principles that (a) an accessible, level site was available (to avoid additional groundworks), and (b) it was within walking distance of a social housing scheme and young families. For these negotiations to work well, and in recognition that communities already know each other best, required that the community organisation step back into a more supportive capacity, as administrator and facilitator, rather than director. These subsequent projects were taken forward by Tagsa Uibhist only, as the initial partnership with Cothrom Ltd had ended.

¹⁶³ *Polycrubs* are robust, durable and resilient polytunnel designed and produced by a homegrown community-owned company in Shetland info@polycrub.co.uk



Figure 5-6 Lochboisdale Community Polycrub group

The response to the call for interest received six replies, and out of these three sites were chosen. These were provided by local crofters who were willing to free up some of their land for this community development initiative. Site visits were made to check the accessibility to social housing and close proximity to young families, and once the sites were accepted local residents quickly started to form small groups to take each site forward, in ways similar to those described previously (see also *Final Report Grow Your Own Community CCF-4968*, 2018, pp10-11¹⁶⁴). There was a buzz of excitement around the investment of horticultural facilities in small, isolated townships, whose inhabitants self-described as ‘feeling overlooked’. Enthusiasm arose through this opportunity to be recognised, but also through the chance to grow together with their neighbours in purpose-built facilities that would usually only be provided at public sites. The legacy of this project was evidenced through the level of interest coming from the wider community who also now wanted to have polycrubs for their communities. They were in a position to provide suitable land that was accessible to the required demography and were excited at the prospect of

¹⁶⁴ Donkers, L. (2018) *Final Report Grow Your Own Community CCF-4968*
<https://issuu.com/growyourowncommunity> [Accessed 06.06.19]

assistance to bring their communities together in this straightforward initiative that supported local growing facilities whilst also reviving social cohesion.

Co-creation began by focusing on the experiences of those who would be involved in or be affected by the activities taking place through the initiation of meetings to get to know one another, share their experiences, and gain some value from these interactions so that all parties acquired a deeper understanding of what was taking place and believed it to hold some value for them. Each engagement process was initiated through invitations to take part, so that no one felt coerced into collaborating. This aspect created a degree of vulnerability for the projects, but also gave an important space of trust for participants to feel that they were taking part on their own terms. The *Grow Your Own Community* projects were successful because the groups came together out of mutual interest, developed ways of working together, and were able to sustain this by overcoming problems as they arose. The community of growers rose to the challenge of working in a confined space with people they may not always have known particularly well to do something they each aspired to - growing their own produce. So, while the emphasis was on the growing activity, they could not achieve this successfully without also attending to the needs of the group.

5.1.3 Co-creating action

With the treat of climate change, humanity sits at the junction, in between disaster and transformation. It is a crucial time for research into sustainability that can actively facilitate transformative change through regenerative practices. Community embodied knowledge can be a valuable force in fostering transformative change and sustainability in remote communities, through people's connections with each other and their attachments to their places. This research aimed to identify the value of existing community embodied knowledge as a deep influencer to reconnect people and nature to rethink how we know and act in relation to sustainability transformations.

The food-growing initiatives were designed to provide co-learning opportunities for the community to set up and run their own growing hubs, exploring the potential of practical wisdom to improve climate literacy and

reduce carbon emissions. During 2017-18, CO₂e was reduced by 38.94tonnes, through increased growing of fruit and vegetables. The project provided young families with communal growing facilities; promoted adaptation measures and low carbon behaviours by working with local organisations and businesses to create demand and capacity for locally produced food; supported crofters to increase production of 'Machair Potatoes' through providing storage facilities and delivery services; developed community resilience and self-sufficiency by delivering practical workshops using local knowledge to improve carbon literacy, and reduced waste by teaching the use and reuse of local resources.

Understanding the mindset of communities in places like Uist means appreciating that they exist between knowing and not knowing. They know that their future depends on their ability to adapt to changing circumstances, which amounts to a very different experience of living than those in the urban context. Knowledge in rural communities is based on capacity to make and produce something to live from. This involves knowledge of the materials they require and how to access them, which is reliant on acute observational understanding and ability to wait for the right signs. Counter to this runs a similar set of knowledges that amount to 'not knowing' whether they will achieve their goal this year. Because they cannot know for certain whether the materials (seaweed) will be available or sufficient, whether the right conditions will appear (gales that bring the seaweed inshore), or the signals (rainfall, lack of rain) will appear, and finally whether these will enable the task (harvest) to be completed. Of course, they will achieve something of their aims, but they strive always with the hope that this year will be a good one that will mean they can celebrate, that they can have some reserves, can feel a little satisfaction. This ability to live within these two states of knowing and now knowing comes about through living with intergenerational knowledge, developing skills to source and make materials, engaging deep durational and seasonal knowledge, as well as acute capabilities to observe and to wait.

My role in using an eco-social arts process is to draw attention to wider issues of concern that are brought on by climate change and encourage reflexive reassessment via new thinking and doing that draws on the communities existing

materials, methods and processes. The relationship is developed through a collaborative process that respects existing knowledges and hierarchies but introduces an alternative mindset that references Climate Literacy. This information is not at odds with a society who are dependent on the environment for their livelihoods but the way this information is introduced needs sensitive handling in order to be considered rather than rejected. I occupy a different space, from another perspective, and can draw links to relevant information that can translate into local understanding.

I wish to activate and expand the potential of art as an agent of social intervention, community building, and cultural change. I have found the best way to do this is through an open-call process so that participants self-nominate. The development that follows is built around close listening and dialogue, and importantly, showing this through the development of projects that reference the participants experiences, concerns and ideas. Essentially, what is created is a space for the community to enter, influence and direct themselves. They start to have Climate Conversations that make sense and lead onto transformative climate-aware actions that they take themselves. The artistic aspects help with visualisation and in the creation of new spaces to reconsider and reflect on recent changes that have occurred locally regarding increasing levels of social isolation, poor diet, mental and physical health issues as well as the potential impacts of climate change, and increased food costs. The engagement aspects offer another view on the situation that enables participants to see and hear themselves speaking and acting.

The creation of these spaces acts as a catalyst for eco-social change and community coalition building, rekindling a sense of place, stewardship and public participation. It fits in with the community's inherent qualities of knowing and not knowing, and sets parameters that are achievable and highlight the importance of the 'untapped potential' to be found in embodied knowledge. This experiential learning serves the sustainability of the local area towards renewing island communities that have been affected by environmental and societal decline. In nurturing the recognition of embodied knowledge, this research is

invested in developing skills to reconnect communities with their culture, their environment and their aspirations.



Figure 5-7 Sollas Community Polycrunch group

5.1.4 Not everything works

Here, I discuss my collaborative partnership with two climate change-oriented Creative Industry organisations, which came about as a result of a successful application for a Scottish Graduate School of Arts & Humanities AHRC Creative Economies Scholarship (awarded, October 2017).

Creative Carbon Scotland (CCS),¹⁶⁵ promotes environmental sustainability through arts and culture, and Sniffer,¹⁶⁶ is a significant Scottish change-making organisation. These charitable organisations joined my supervisory team as advisors. The intention was that my project would benefit from engagement with such experienced practitioners who are dedicated to addressing climate change and educating the wider public in how to effect positive environmental change, and would clearly be instrumental in assisting me

¹⁶⁵ <https://www.creativecarbonscotland.com/>

¹⁶⁶ <https://www.sniffer.org.uk/>

to disseminate my research. In turn, by having a direct involvement in my participant action research, they would strongly benefit from shaping and learning from the approaches adopted, and would gain from an understanding of how co-creative and interactive artistic projects can help deploy local knowledge to the benefit of both the community and the professional sector. They envisaged that the data and embodied knowledge I collected would be invaluable in their education programme, and support their engagement processes, providing a strong platform upon which to build future initiatives. The University of Dundee, in supporting my application, saw this partnership as a chance to build on expertise with third sector partners, increasing communication in the nexus of research, analysis, interpretation, and fieldwork.

However, the joint intentions for our collaboration, which drew from key aspects relating to the process of engaging communities, did not develop along the lines we set out, which was possibly due to misaligned expectations. In reviewing the partnership, Ben Twist (CCS) said: 'I hope you're not disappointed that our collaboration hasn't turned out as you expected... from the CCS point of view I think I assumed you would contact us when you wanted to do something. You were away a lot and clearly doing a great deal of interesting stuff, and it seemed as though you had plenty of other people to collaborate with! I think I said at the beginning that I was uncertain what the role of CCS as a partner was, and that our capacity to take an active role was limited. I hope I always responded appropriately when you asked my opinion about something.' Ruth Wolstenholme (Sniffer) responded as follows: 'I would love to find out more of your key learning from this process, and the messages that you feel our stakeholders would benefit from knowing and exploring. If there is any input that I can offer, please do say'. They both agreed that they could support both the dissemination of my completed research, and the possibility of hosting workshops that share my discoveries from Uist and Aotearoa/NZ with Scots. I hope to develop a more active relationship with both organisations after I have fully completed the PhD process.

5.1.5 Summary

Isolated, rural communities are losing touch with their embodied knowledge about environmental sustainability. This series of food growing projects sought to intervene in that process by using art to strategically promote regeneration and stimulate eco-social intra-actions across communities, thereby tackling this contemporary loss of connection to environment by initiating practical ways to reengage. This approach aimed to rekindle understanding of the importance of traditional community practices such as ‘working together’ and the use of local resources, acknowledging the relationship that exists between humanity and the environment, and in the process developing carbon literacy as a contribution towards a more connected and regenerative future. These endeavours introduced key ideas about the potential for co-creative artistic practices to assist in the transition of society that can respond, at some level, to the threat of climate change, and the necessity of restoring a culture of interconnectedness across human and non-human realms.

The next chapter will present a comparative case study undertaken in Aotearoa/NZ, on the role that an environmental restoration organisation plays in teaching how regenerative practices can influence governance of resources and develop flourishing communities.

Chapter 6: Ecological and Social Regeneration

In this chapter, I discuss how to shift a community's actions towards an environmentally regenerative future by utilising community embodied knowledge as a tool of engagement. This discussion begins with an explanation of the range of terms associated with current ways of addressing societal impact on the environment and follows with a comparative community project case study carried out in Aotearoa/NZ. In this study, I survey the work of the Kaipātiki Project, an environmental restoration organisation teaching regenerative practices that are underpinned by the concept of *Kaupapa*¹⁶⁷ (a way of framing Māori knowledge). I assess the capacity of this organisation to build an environmentally regenerative future through its approach to community activation, which promotes interconnectedness across the whole ecosystem, and uses creative strategies to assist with reconnecting community with place.

6.1 Strand 8: How can a community's embodied knowledge contribute to creating an environmentally regenerative future?

6.1.1 What is an environmentally regenerative future? Understanding the terminology

In 1987, the United Nations World Commission on Environment and Development defined the term *sustainable* (The Brundtland Report *Our Common Future*),¹⁶⁸ as a cultural concept to express the need for controlled human

¹⁶⁷ 'Tuakana Nepe writes that *Kaupapa* is a 'way of abstracting Māori knowledge, reflecting on it, engaging with it, taking it for granted sometimes, making assumptions based upon it, and at times critically engaging in the way it has been and is being constructed.' Nepe, T. (1991) 'E Hao Nei e Tenei Reanga: Te Toi Huarewa Tipuna: Kaupapa Māori, an Educational Intervention System' MA Thesis, University of Auckland <https://www.worldcat.org/title/e-hao-nei-e-tenei-reanga-te-toi-huarewa-tipuna-kaupapa-maori-an-educational-intervention-system/oclc/663714618> [Accessed 08.08.18]

¹⁶⁸ United Nations World Commission on Environment and Development (1987) Brundtland Report *Our Common Future* 1987 Para 27, Chapter 2, Section 1V

development that does not compromise the ability of future generations to develop theirs. Since then, the term has been used by governments and corporations to defend the continuation of human progress that we now know has come at unfathomable cost, through depletion of natural resources, climate change and ecological collapse. This was due, in no small part, to a desire to maintain and advance human lifestyles by relying heavily on the use of natural resources that took millennia to form, and the transformation of these into man-made substances that have ultimately caused major ecological change.¹⁶⁹ These actions prioritised the short-term needs of the human, over and above the long-term ecological evolution that created the conditions for our human existence. This chapter looks at how we are beginning to think in terms of our place in evolution and learning to act within the creative possibility of uncertainty to reframe our role on the planet as ‘co-evolutionary participants’.¹⁷⁰

We have mistakenly interpreted nature’s capacity to deal with upheaval and disruption as an ability to ‘re-balance’ itself: ‘the assumption that nature has appropriate states to which it should return...perceived as... “natural”’ (Zimmerman & Cuddington, 2007, p 2). Psychologist, Zimmerman and ecologist, Cuddington, reveal in their paper, *Ambiguous, circular and polysemous: students’ definitions of the “balance of nature” metaphor*¹⁷¹ that this widely held belief stemmed from ‘religious assumptions of a divinely determined stability’, and continues to play a role in modern ecology studies and green politics. Their research was gathered through teaching ecological literacy to science students at two Midwestern universities in the US. The authors found that this perception is a

http://netzwerk-n.org/wp-content/uploads/2017/04/0_Brundtland_Report-1987-Our_Common_Future.pdf [Accessed 16.07.19]

¹⁶⁹ Tilman, D. & Lehman, C. (1987) *Human-caused environmental change: Impacts on plant diversity and evolution Colloquium Department of Ecology, Evolution, and Behavior*, Upper Buford Circle, University of Minnesota, St. Paul, MN 55108

<https://www.pnas.org/content/pnas/98/10/5433.full.pdf> [Accessed 23.07.19]

¹⁷⁰ Regenes Institute (2019) *Bringing Human Communities into alignment with earth’s natural systems* <https://regenerat.es/regenerative-development/> [Accessed 04.04.19]

¹⁷¹ Zimmerman, C. & Cuddington, K. (2007) *Ambiguous, circular and polysemous: students’ definitions of the “balance of nature” metaphor* Public Understanding of Science Sage Publications <https://journals.sagepub.com/doi/pdf/10.1177/0963662505063022> [Accessed 16.07.19]

hinderance to learning about ecological concepts and prevents its dissemination to the public, significantly affecting policy and behaviour. They concluded that unless this perception that ‘nature can re-balance itself’ is changed, there will be difficulties in building agreement on how to combat climate change.

People think: ‘Everything will be OK. It’ll all balance out in the end’... We had students consider a scenario where a lake was contaminated with copper due to either a train derailment or a landslide ... This would profoundly influence the ecosystem. But 93 percent of them (mistakenly) thought the system would recover.’¹⁷²

In 2015, 193 world leaders adopted *Transforming our World: The 2030 Agenda for Sustainable Development*, including *17 Sustainable Development Goals* (SDG),¹⁷³ which sought to deliver ecological and social *sustainability* by addressing the range of complex challenges and their root causes with a commitment to ‘end extreme poverty’, ‘fight inequality and injustice’, and ‘fix climate change’. By 2016, the COP Paris Agreement on climate change, came into force. This pledge, signed in Paris by nearly every country, was a commitment to limit warming to 1.5°C above pre-industrial levels through controlling increases in CO₂e emissions, and is known as the *carbon budget*. In 2018, the Intergovernmental Panel on Climate Change (IPCC) issued a Special Report¹⁷⁴ where it set out the best available scientific, technical and socio-economic literature related to understanding global warming, projected impacts and risks, emission pathways and sustainable development modelling, such as Earth System Models¹⁷⁵.

¹⁷² Jacobs, T. 2007 *Belief in ‘Balance of Nature’ Hard to Shake* Pacific Standard <https://psmag.com/environment/belief-in-balance-of-nature-hard-to-shake-4785> [Accessed 16.07.19]

¹⁷³ *The Sustainable Development Agenda 17 Goals to Sustain our World* <https://www.un.org/sustainabledevelopment/development-agenda/> [Accessed 17.08.18]

¹⁷⁴ Intergovernmental Panel on Climate Change (2018) *Special Report IPCC on the impacts of global warming of 1.5°C* IPCC, Switzerland https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf [Accessed 18.07.19]

¹⁷⁵ Carbon Brief (2019) *How do climate models work?* <https://www.carbonbrief.org/qa-how-do-climate-models-work#types> [Accessed 16.07.19]

Calculations, based on various factors, indicate that in a short number of years (perhaps as little as 8 or 9), the 1.5°C *carbon budget* will have been exceeded.

*Human-induced climate change*¹⁷⁶ identifies an increase in CO₂e gases resulting from human activities and has directly impacted air and ocean temperatures leading to melting of snow and ice and the rising global average of sea level. In the push to overcome the excess carbon in our atmosphere there is a need to find ways to reduce CO₂ production, and increase potential of carbon to be stored environmentally, through drawing down into the soils and aboveground vegetation, at a higher rate than is currently being produced. For this reason the *sustainability* paradigm set out by the UN and others will not enable humans to sufficiently redress the CO₂e imbalance they are responsible for creating, and can, perhaps, be better approached through a *regenerative* regimen that restores, renews and revitalizes sources of energy and materials, through systems that combine the needs of society without destroying nature, producing a ‘win-win-win’ outcome for the individual, community and planet (Wahl, 2016).¹⁷⁷

If we have the will and capabilities to do so, humans can transform how we live on the planet through *regenerative practices* that use a design process whereby the situatedness of people in their environment is fully considered, along with use of renewable resources. This approach leads to less waste and more efficient use of resources that use less energy and can be carbon neutral.¹⁷⁸ *Environmental regeneration* is land renewal through reclamation and improvement, which also conveys recognition of the cost of human use of natural resources and the need to regenerate them. It involves active or passive restoration of parts of the environment to a pre-human, or ‘wild’, state to restore biodiversity and

¹⁷⁶ Climate Communication Science and Outreach (2019) *How we know the warming is human-induced* <https://www.climatecommunication.org/climate/human-induced-warming/> [Accessed 16.07.19]

¹⁷⁷ Wahl D.C. (2016) Re-generation <https://gaiaeducation.org/wp-content/uploads/2017/11/PM89-Regeneration-pp13-16-1.pdf> [Accessed 16.07.19]

¹⁷⁸ Miller, D. (2012) Regenerative Design: An Exploration of Process, Practice and the Role of Planners <https://open.library.ubc.ca/cIRcle/collections/graduateresearch/310/items/1.0075745> [Accessed 17.07.19]

natural biomass.¹⁷⁹ As well as having ethical implications, this practice also has practical applications through the creation of carbon sinks (where carbon is drawn down from the atmosphere and stored ecologically in soil organisms and plants). *Environmental or ecosystem restoration*, is the process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed.¹⁸⁰ It seeks also to repair past environmental damage, restoring the ecology to its pre-damaged state, by working at all scales, from local volunteer projects to corporation scale operations.¹⁸¹

Regenerative agriculture is a holistic system of farming praxis that ‘increases biodiversity, enriches soils, improves watersheds, and enhances ecosystem services.’¹⁸² It does this by harvesting carbon from the atmosphere and capturing it in soil organisms and aboveground vegetation, whilst simultaneously improving soil fertility to revitalise agrarian endeavours, and reducing climate instability. *Carbon Farming* takes a similar approach, setting out, through plant choices, sowing rates, and soil management strategies, to deliberately improve the rate at which CO₂ is removed from the atmosphere and converted to plant material and soil organic matter.¹⁸³

¹⁷⁹ *Gorse for the trees: How one man brought back a forest*
<https://www.mnz.co.nz/national/programmes/ninetoonoon/audio/2018703481/gorse-for-the-trees-how-one-man-brought-back-a-forest> [Accessed 18.07.19]

Fool and Dreamers: Regenerating a native forest
<https://www.youtube.com/watch?v=P3WmuFHdipU> [Accessed 18.07.19]
 Hinewai Reserve <https://www.hinewai.org.nz/> [Accessed 18.07.19]

¹⁸⁰Society for Ecological Restoration International Science & Policy Working Group. 2004. *The SER International Primer on Ecological Restoration*. www.ser.org & Tucson: Society for Ecological Restoration International.
https://www.ctahr.hawaii.edu/littonc/PDFs/682_SERPrimer.pdf [Accessed 06.07.19]

¹⁸¹ Berger, J.J. (1990) *Environmental Restoration: Sciences and Strategies for Restoring the Earth* Island Press, USA

¹⁸² Terra Genesis International (2016) *Regenerative Agriculture: A Definition*
<http://www.regenerativeagriculturedefinition.com/> [Accessed 17.07.19]

¹⁸³ The Carbon Cycle Institute <https://www.carboncycle.org/carbon-farming/>
 [Accessed 17.07.19]

6.1.2 How to shift a community's actions towards regenerative sustainability

During my studies, I came to understand something of the cultural disparities between Western, positivism-based knowledge (knowledge acquired by the senses and verified objectively by logical, scientific, or mathematical testing), when compared with more indigenous-led approaches, identified in Kaupapa Māori Theory (KMT). These depend on embodied, instinctive and intuitive knowledges, and draw from metaphysical beliefs and banks of inherited/intergenerational knowledges founded in land-based ways of being-in-the-world. Such subjective and diverse ways of knowing, reveal quite different world view perspectives that reside in a culture of interconnectedness across human and non-human realms, and link environmental stability directly to individual health and community well-being. Although, since 1995, with the general availability of the world wide web, perhaps all knowledge should now be viewed as a 'shared resource', or a 'knowledge commons' – a cultural resource accessible to all members of society – in a 'new shared territory of global distributed information' (Hess and Ostrum, 2007, p18).

My research journey led me to undertake a period of research in Aotearoa/NZ and came about through a chance discussion with an artist I had met in 2015. After I explained my research purpose was to promote the value of community embodied knowledge, she suggested I look at the practice of Professor Huhana Smith, a Māori visual artist, curator, and principal investigator in research engaging in major environmental, transdisciplinary, Kaupapa Māori and action-research projects, and Head of College of Creative Arts, Massey University.¹⁸⁴ In the mid-2000s Smith was involved in developing a community-wide land restoration project in the Horowhenua Coastal Zone, on the south-west coast of North Island. Working with her own *imi* (Māori term for 'tribe'), this project set out to reinstate the river, estuary and beach ecosystem according

¹⁸⁴ College of Creative Arts, Massey University: Dr. Huhana Smith
<https://creative.massey.ac.nz/about/our-people/school-of-art-faculty-and-staff/huhana-smith/> [Accessed 22.07.19]

to traditional cultural principles. After making contact with Smith, and receiving a copy of her PhD research,¹⁸⁵ I began to learn more about the Māori world view, which is built up through connectedness to the land itself, and its ancestry, which is sited and specific to the inhabiting spirits of place; engendering both stewardship and kinship with the land and all its constituent parts. I was fascinated to read about her community's positive response to the project, and how their eco-social embeddedness, that is, the extent to which individuals are enmeshed in their communities and in the natural world, was similar to what I had observed in the Uist community also.

Smith identifies the basis of her work, through research leadership, adaptation strategies, and transition plans, as extending from her connection to her ancestral land. Although born in Australia, she is genealogically connected to the people living in the area at the Kuku Ōhau estuary, and her concerns about poor water quality lie at this nexus, where the freshwater system meets the marine. This collaborative work was underpinned by the Māori conceptual basis of *whakapapa* – ‘the genealogical reference system which ties together people, land, water, animals, spiritual concepts, conceptual contexts’ (Smith, 2017),¹⁸⁶ actively reconnecting the people to the homeland and restoring local water bodies to better health. It encompassed wetlands, stream systems, dune lake systems, and larger bodies of water along the coastline, and showed how the local *invi* and *hapū*¹⁸⁷ were able to lead the way in this restorative and regenerative work.

The *Wai o Papa Exhibition: A project of hope for Māori coastal communities*¹⁸⁸ showed what the adaptation strategies might look like. Developed through the

¹⁸⁵ Smith, S. (2007) *Hei Whenua Ora: Hapu and invi approaches for reinstating valued ecosystems within cultural landscape* PhD Thesis in Māori Studies, Massey University, Palmerston North, Aotearoa/New Zealand <https://mro.massey.ac.nz/xmlui/handle/10179/2133> [Accessed 08.08.17]

¹⁸⁶ *Creative Time Summit Toronto: Of Homelands and Revolution* | Land – Hubana Smith (2017) <https://www.youtube.com/watch?v=INQlvyevm2g> [Accessed 03.11.17]

¹⁸⁷ The word *hapū* refers to being pregnant but also the belonging of people to that land.

¹⁸⁸ The Third Wai o Papa Exhibition <https://www.deepsouthchallenge.co.nz/news-updates/third-wai-o-papa-exhibition-project-hope-maori-coastal-communities> [Accessed 03.04.19]



Figure 6-1 Wai o Papa Exhibition 2017 Photo Credit: K. Turner

Kei Uta Collective,¹⁸⁹ of which Smith is a founding member, this work was exhibited in a disused milking parlour on farmland owned by the local iwi and included a set of maps visualising the impact of climate change on the landscape over the next 100 years, if action is not taken.

They were created using a combination of traditional Māori knowledges, scientific data and design methodologies in an effort to relate climate change to the Māori communities who will directly face its impacts in the coming years. This project used a science-design-art methodology, which integrated listening to the community through farm walks with knowledge holders to observe and learn from the land through the people who knew it best, in order to model community participation and engagement around cultural, economic and ecological knowledge development. The design brief considered current land use, through a process of reflection on the cultural and spiritual

¹⁸⁹ The Kei Uta Collective is a specialist transdisciplinary platform. It brought together scientific and creative practices with a mātauranga Māori approach, focused on Kuku in the Horowhenua region to increase access to, and understanding of Māori socio-spatial relations, whilst adapting to a changing climate. Howden-Chapman (2018) *Counterfutures: Left thought & Practice Aotearoa* FIVE <http://counterfutures.nz/5/Howden-Chapman.pdf> [Accessed 23.10.19]

associations and the impacts that sea level rise threatens. This resulted in the development of co-created ‘culturally appropriate’ land-based climate change adaptation strategies that proposed alternative options to dairy farming, such as growing *harakeke*¹⁹⁰ (*Phormium tenax*, ‘New Zealand flax’) for textile production, and other aquatic-based farming methods such as ‘algae farming, green-lipped mussel or fish hatcheries’. Work from this exhibition also featured in a contemporary art exhibition entitled, *This Time of Useful Consciousness – Political Ecology Now* (2017), which took the aviation term ‘time of useful consciousness’ (a period between being deprived of oxygen and passing out, when it is still possible to take action) as an analogy with climate change.¹⁹¹

We all have something to learn from *tikanga*¹⁹² and the paradigm of *kaitiakitanga*¹⁹³ that carries a responsibility of active stewardship for future generations, whilst providing for today.

Professor Huhana Smith (Creative Time Summit, 2017)

6.1.3 Understanding Kaupapa Māori Theory in Practice

During two research visits to Aotearoa/NZ in 2018 and 2019 funded by Scottish Graduate School of Art and Humanities, I undertook to find out more about the role indigenous communities with long standing interconnected relationships with their natural environment can play in reversing a trend of devalued practical

¹⁹⁰ *Harakeke* is the Māori term for *Phormium tenax*, or New Zealand flax. An evergreen perennial plant with 2m long strap like leaves. It is native to NZ and is used extensively by Māori for traditional textile production for arts and crafts, including string, rope and sail making.

¹⁹¹ *This Time of Useful Consciousness – Political Ecology Now* (2017) Contemporary Art Exhibition at The Dowse, Lower Hutt, Aotearoa/NZ: "Time of useful consciousness" describes those few moments between being deprived of oxygen and passing out, a period in which the full extent of the danger is known, but it is still possible to act. Used as an analogy for climate change, this time is now. In the Pacific and elsewhere climate change is already having a dramatic impact on daily life. We need to take steps globally and locally to avoid catastrophic sea level rise, extreme weather and irreversible changes to our environment.' <http://dowse.org.nz/exhibitions/detail/this-time> [Accessed 23.10.19]

¹⁹² *Tikanga* is protocol, the Māori concept of the right way to do things.

¹⁹³ *Kaitiakitanga* is the Māori term for guardianship and protection based on the Māori world view.

knowledge (Te Kanawa, 2012). Together with the limits related to the transference of such a model, this part of the research focused on *regenerative practices*¹⁹⁴ to show how these can influence governance of resources and develop flourishing human and non-human communities. I wanted to learn first-hand how KMT could be realised in a community and to ascertain whether elements of it can inform other communities such as the one in Uist. More broadly, I thought it might help resident island communities to develop the authority to make decisions and set the agenda for themselves enabling a different sort of future to be realised that connects them more culturally, politically and environmentally than they do at present.

Through university contacts at Dundee, I approached Elam School of Art to propose a period of research (Aug-Nov 2018). I met with the Head of the School and learned from him that Kaupapa Māori praxis underlies the teaching and support of their students within the contemporary art framework. Given that I was a trained artist, I felt being in an art school environment would provide an appropriate context to experience Kaupapa Māori, and hoped to learn from practitioners, lecturers, and students how mutual trust, respect, reciprocity and kinship manifests in the art school situation. Over the course of this four-month research period, I came to appreciate that I was expecting much more than was possible from a relatively short period of time. I found that my minimal understanding of Kaupapa Māori left me unable to articulate what I had hoped to find. Also, I had the feeling amongst the people that I spoke to that it was not possible for it to be practised in an institution, in the way I had understood. However, the uncertainties that arose through my questioning eventually led to helpful suggestions of other outlets where I might find answers, and eventually I found my way to groups and individuals in the wider community who were able to share with me their experiences and understanding of the concept.

¹⁹⁴ Wahl, D.C. (2018) *Sustainability is not Enough: We need Regenerative Cultures* Insurge Intelligence <https://www.resilience.org/stories/2018-05-23/sustainability-is-not-enough-we-need-regenerative-cultures/> [Accessed 17.07.19]

I had found the process of trying to develop contacts and make connections rather difficult and disheartening at times. Initial meetings with academics and practitioners were straightforward to arrange but did not seem to lead anywhere. I found these experiences to be more interrogatory than discursive, and it was hard to gauge whether I was speaking to someone who was interested in my research or only interested in checking-out my motives. Follow-up discussions, though promised, never materialised and this left me without the necessary scope for exploratory dialogue. It seemed that the more questions I asked the less clarity I gained, and I began to wonder whether I would achieve the outcome of the research I was seeking. My final point of contact was organised with a renowned ‘master weaver’ who was a friend of my research supervisor, but also, by chance, of a crofter neighbour in Uist. I looked forward to this meeting but had little expectation of whether it would turn out to be fruitful.

In early October 2018, I was invited to meet this person in the Te Awe Project Room, at Auckland’s Memorial Museum where several other master weavers were gathered. Te Awe is a vast stock take and digitisation exercise being carried out by Auckland Museum to examine 10,000 Māori *taonga* (highly prized objects or natural resources). These weavers had been selected from across Aotearoa/NZ for their highly regarded expertise and were working together to discuss and agree on specific definitions for the different construction techniques utilised in the making of the Māori textiles, mostly *Korowai* (ceremonial cloaks). My host introduced me to all present. I was not familiar at all with the materials or processes involved in the making of the artefacts they were looking at. Yet, despite my ignorance, the gravitas of the occasion was palpable as I observed the reverent way the *Korowai* were examined, and listened to the low-toned discussions, quietly held amongst the weavers. At the end of the day, during tea, discussion about my research led to an invitation to attend an upcoming weaving weekend at a *marae* (a communal and sacred meeting ground for Māori people), which I gladly accepted.

This extraordinary encounter marked a turning point, and I finally could start to engage with Māori culture, experience KMT in practice, and reflect on its

comparability to communal practices I was all too familiar with in Uist. *Kaupapa Māori* is fundamentally about the acknowledgement of each other's rights through principles of mutual respect involving face-to-face encounter; looking, listening and only then, speaking; sharing and hosting; and finally, exercising caution, so as not to trample on the rights, personal prestige and character of one another.

6.1.4 Regenerative Practices. Case Study: Kaipātiki Project

Towards the end of this period of research, I decided to follow up on a chance introduction with a community project manager at a public, city-based Climate Change Workshop. She had suggested my research would benefit from a meeting with some of the team at the Kaipātiki Project¹⁹⁵ and perhaps to discuss the potential of working together in the future. My meeting with them went well and I was pleased to be introduced to their team who ran a plant nursery, undertook land restoration work, and supported a large group of volunteers. This was followed up by a Skype meeting in early December after I had returned to the UK, where I proposed a period as resident artist with them. I think if my initial meeting had focussed primarily on what I wanted to do then it might have been difficult for the project staff to think how we could work together. Instead, I had the chance to listen and see first-hand the work that the project undertakes, and understand something of the scope of its enterprise, aims and ambitions, which led me to consider how my own approach might map on to theirs. I felt that an artist-in-residence placement with them would develop my understanding of their regenerative approach to working with community and environment, and that I could reciprocate with creative advice and run workshops.

The Auckland-based Kaipātiki Project have a mission to identify and solve local environmental challenges through the creativity of the community. Their work contributes towards developing connected, resourceful, and healthy families, neighbourhoods and communities by regenerating local environmental

¹⁹⁵ Kaipatiki Project Environment Centre <http://kaipatiki.org.nz/>

systems degraded through new road developments and the building of the Auckland Harbour Bridge (an eight-lane highway crossing the Waitemata Harbour). The project began in 1998, led by local woman, Jenny Christianson, who gathered a group of volunteers to set about trying to redress the invasion of weeds and non-native animal pests that were displacing the native biota. The tree felling programme had exposed the fragile riparian zone (the ecologically diverse vegetation strip between land and water that also filters out pollutants and prevents erosion) to an influx of exotic species from surrounding gardens, and the resulting dense weed mat inhibited native tree seedlings from germinating naturally.¹⁹⁶ The volunteers, with the assistance of Auckland's North Shore Council, undertook a weeding and planting regime. Twenty-one years on, the informal project has now formed a Trust, developed its own native species nursery growing over 80 different plant species, and continues to work closely with a broad cross-section of the community including volunteer groups, local schools, local residents, and other local environmental organisations. The work extends to teaching regenerative environmental practices, which integrate ecological knowledge with practical strategies for conservation.

My 3-month period of residency involved collaboration across several areas through close working with the project team and the intention that my creative involvement would extend some of their engagement activities. I wanted to further develop my understanding of KMT, observing how it is realised in practice at community organisation level. Working with the staff, community and environment, I also explored how my creative approach related to and might contribute towards the organisation's underpinning objective to help communities live in a more environmentally sustainable manner. The residency involved developing creative community engagements that were responsive, adaptive and attuned to the local situation using values-based leadership and

¹⁹⁶ Harpeth Conservancy (2019) *Riparian Zones: What are they and why protect them?* <http://www.harpethconservancy.org/programs/restoration/riparian> [Accessed 17.07.19]



Figure 6-2 Exploring phenology through cyanotypes

evaluating programmes using the indigenous KMT framework. I got involved in the Eco-Fest Month delivering creative activities to school pupils, attending local school visits, working with volunteers in Nursery plant production, and taking part in regular volunteer days working at a new restoration site.

The Awataha Greenway Project for Northcote¹⁹⁷ is developing a new green ‘corridor’ along the route of the Awataha Stream, which connects a network of parks and public spaces to improve the environment for people, plants and wildlife, as well as the quality of water in the stream. The key task involves the process of ‘daylighting’ the stream – a strategy for restoring previously enclosed water courses by firstly removing obstructions like pavements or culverts, then returning it to a more ecologically-natural condition, which enables more water to pass through the channel, reducing peak flows and

¹⁹⁷ Northcote Development The Awataha Greenway Project
<https://northcotedevelopment.co.nz/blog/the-awataha-greenway-project/> [Accessed 28.07.19]

flood risks.¹⁹⁸ It is specialised, technically complex and labour-intensive work, requiring essential understanding of underlying soil types and channel materials, stream ecology, horticulture, and community activation to ensure a supply of volunteer labour support to undertake the work, but also to teach stewardship. These aspects are all provided by the highly skilled and experienced team at Kaipatiki.

The key engagement skills and attributes I developed during the placement were the ability to listen well to all the participant groups; giving and receiving feedback and responding perceptively to others; the ability to negotiate activities and deadlines with my mentor and the management team; engagement in debate and developing awareness of the need to gain support; recognising the implication of my own research within the real life community and cultural contexts; engagement in dialogue with those who use the output of research to achieve influence and impact by taking part in several local, authority-led seminars and workshops; recognising common and conflicting interests within the area of community activation; sensitively and respectfully responding to individual difference within the working and research environment; understanding the equality and diversity requirements of the community organisation; and finally, understanding the relevant policy-making processes, and analysis and understanding of policies within the situated context.

My residency at Kaipātiki Project led me to reconsider how I understand the way community organisations can work effectively, and cross-culturally, with their communities. It helped me to see the importance of setting goals that can take slower, more painstaking approaches that do not leave community members out, or cause offence by making cultural errors. This has revealed the complexity, but also the necessity, of finding better ways to work inclusively and collectively that deliver not only the required outcomes, but also respond to and address the needs and findings as they are encountered. It is not

¹⁹⁸ NRC Solutions *Naturally Resilient Communities: Daylighting Rivers and Streams*
http://nrcsolutions.org/wp-content/uploads/2017/03/NRC_Solutions_Daylighting_Rivers.pdf [Accessed 18.07.19]

straightforward to be considered and accepted as an artist within such an organisation, as these stated complexities can impact on the vision and goals an artist may wish to manifest through her work. However, I have come to see the importance of being in an organisation that wishes to find a way to bring everyone along. Here, the artist can provide valuable input, if collective thinking and action is seen as a necessary rather than a discretionary mode of operation. For me, this obligation to be part of the collective process is a model I wish to develop and promote. I can contribute my difference as a collective necessity, through a reflective and deep consideration of alternative viewpoints and suggestions and learn from my peers about how to avoid unintended pitfalls.

The Kaipātiki Project is an extremely busy organisation delivering a range of ongoing community engagement activities, while also running a thriving environmental restoration programme. It is not easy to pin-point the benefits of my residency to the host organisation, however, at the end of the residency period, the feedback I got from staff members was that while they had not anticipated exactly how my work could benefit the organisation, they had found the experience unexpectedly rewarding. This was particularly as a result of my interest and engagement with their level of expertise, both personally and



Figure 6-3 Stream ecologist at Kaka Reserve

professionally, through extensive opportunities for discussion and dialogue. Through my enquiries they were able to share a great deal of knowledge that opened up, not only mine, but also their own thinking on the importance of such specialist knowledge, which resulted in the sharing of this in a more general way, such as through video blogs on their website and Community Facebook page. I was also able to share with them the value in producing good visual information. To express this, I developed a video piece that tracks one of their key engagement activities - training volunteer facilitators, which was shown at a local Auckland-based art centre as part of Conservation Week.

The invitation to join the team as artist-in-residence came about because the manager I had first met understood that my research and art practice embodied their values of respectful working and learning together. This broad framework encompassed exploring how artistic approaches to working co-creatively can lead to better strategies for sustainable development and community activation. My creative involvement helped to expand community engagement activities, and draw more of the community into a greater sense of ownership of their *whenua* (land) and take up roles as *kaitiaki* (stewards) of their precious *ngahere* (forest), providing opportunities to partner, co-create and explore creative ideas and knowledge development.

This was an amazing opportunity to work as an artist/researcher in a residency situation within an embedded community context exploring imaginative and innovative approaches to community-led and collaborative ecological regeneration that also contributes to the social wellbeing of the community. Through an entangled process of making and research the overlaps and tensions between the cultural and regenerative practices of growing skills (and associated ecological knowledges such as plant identification), volunteering (socio-economic and cultural awareness), restoration practices (removal of exotic species, protection of native species, safe working practices), and emerging learning programmes (Zero Waste Hui, Restoration Series, Advanced Fermenting, Caring for your Fruit Trees, Increase Diversity, Plant Propagation) were brought to the fore in complex projects that draw together ecological principles and sustainable connections.

6.1.5 How an eco-social arts approach shifts community actions

An eco-social art approach inevitably brings environmental projects directly in touch with the public. Artists can help communities to revitalise themselves through art and cultural activities. They do this by involving local individuals and groups in collaborative environmentally engaging activities to develop mutual understanding about the local area. When supported by local organisations and national bodies these kinds of art engagements can provide critical reflection on the benefits of such projects to the community, and hopefully introduce a more meaningful discourse that might otherwise exclude the less vocal, less confident members of society, particularly where historically the communities' experiential, intergenerational and inherited knowledges may have previously been disregarded or devalued.

This approach works with the community's skills and knowledges to co-create project outcomes. It is important to have an approach that enables communities to contribute ideas towards the design of public projects that enliven civic dialogue and community relationships. If these projects are intended to include the community's own skills and experiential knowledges, they will be more meaningful and will also add to the engagement potential. When the community becomes invested as co-creators, they can then draw in others who might not earlier have come forward, or may have been sceptical, perhaps about the motivation behind the project or the intentions of the commissioners. Opportunities for co-creation also builds on the body of collective knowledge and general level of confidence, keeping the community open to the idea of change from within.

As already indicated, (p 103) a problem for artists with eco-social practices has been in gaining recognition for a praxis that strives to foster new values and visions for human understanding of the biosphere. I wish to increase awareness of this type of arts practice that de-emphasises the exclusivity of art, in favour of 'ensemble' practices that hybridise artists' ways of seeing and making through eco-social approaches to community engagement. These encompass the polemics and issues experienced in society during this time of ecological crisis, where the concept of the social view forwarded in the work can be conveyed and

internalised. This enables artists to test and develop their skills in co-creative settings. Although I may be well-known in the community, I can never assume that either I, or my ideas, will be accepted. I approach the development of these relationships from a situated position – in place. And as a ‘deep listener’, I am afforded a greater perspective, as I can draw connections to relevant information that assists community understanding more widely, on matters such as how human activity is changing the climate and natural systems that sustain the community locally.

The next chapter presents a comparative analysis of the forms of collaborative regenerative praxes presented in both this work in Aotearoa/NZ and the Uist study in the preceding chapter. I reflect on the way these projects reveal how communities with long-standing relationships to their surroundings can co-create meaningful futures that enhance the sustainability of both the environment and its inhabitants. The separate aspects of this research are resynthesised, in exhibition form, to foster new understandings of how to value and reintroduce traditional community practices that allow for constructive co-creative action and the development of new practices.

Chapter 7: Comparative analysis, and Resynthesis

This chapter is a summary of research that includes a review of my eco-social approach to art practice through personal, intense ‘being-in-place’. Also, through comparative analysis of collaborative praxes, using my artist residency in Auckland as a lens, I reflect on how my awareness of community embodied knowledge has enabled a community’s environmental disposition¹⁹⁹ to emerge and assist in co-creating a regenerative future. Finally, I describe how the teased-out strands of this research are resynthesised through the *Meeting Ground* exhibition, to show what an ‘ensemble practice’ entails, aspires to and delivers.

7.1 Eco-social approach to art practice

The intense process of ‘being-in-place’, embedded within community life on Uist, has greatly influenced my feelings of connection and motivation towards developing this research for the community, as well as articulating my practice and identity as an environmental artist who works with community embodied knowledge. This durational and emplaced experience has afforded me capacity and opportunity to entangle myself within group life, and progress the interpretive and participatory elements of my aesthetic practice.

In my transdisciplinary practice, the unfolding process of creating and gathering evidence reveals intra-dependent natures. To come to understand this better, I have developed a drawing practice using *frottage*, where a drawing medium (pastel, graphite, charcoal) is rubbed across thin paper, laid against a surface. The paper conceals, until the medium reveals the texture of the surface lying underneath. The drawing medium marks, scuffs and disrupts the paper from above, while the surface beneath dictates what marks are possible, and

¹⁹⁹ Hinds, J. & Sparks, P. (2009) *Investigating environmental identity, well-being and meaning* Sheffield Hallam University Research Archive (SHURA) <http://shura.shu.ac.uk/5398/> [Accessed 26.08.19]

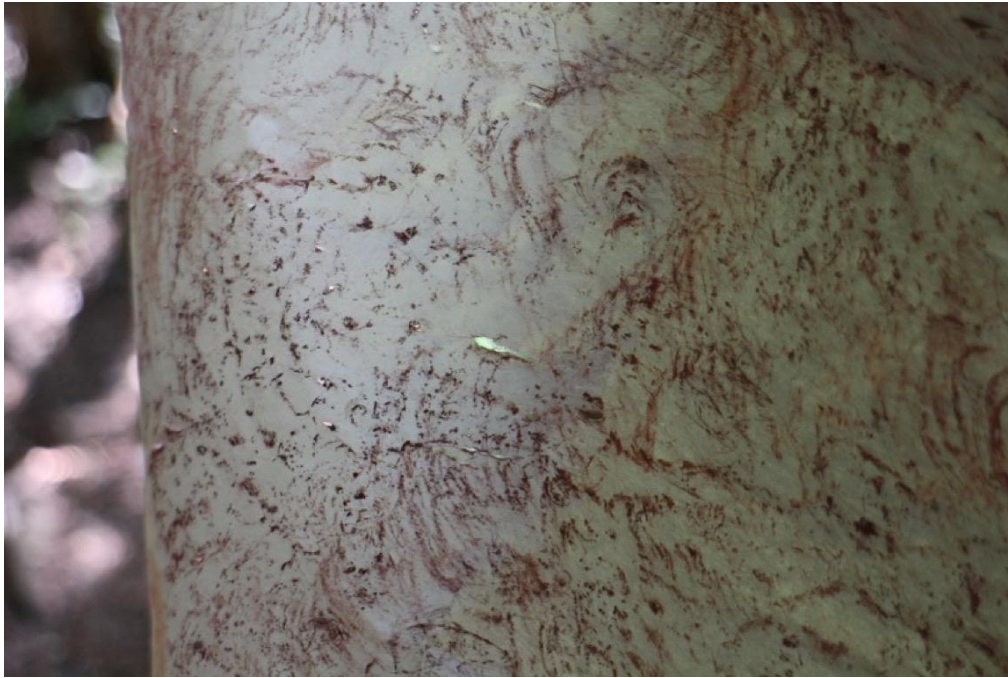


Figure 7-1 Frottage Sanguine conte on Gampi paper 2017

sometimes breaks through: the void left in the paper exposing the surface's undeniable impact on the work. Karen Barad calls this process *agential realism* – 'the forces at work in the materialisation of bodies' (Barad, 2003). The artist initiates this process; is implicated in the unfolding and entanglement of matter, and active in the reaction of the pastel-on-paper-on-surface through making-yet-not-making the mark. This explicitly shifts the foreground/background qualities of each material constituent of the methodology. The intra-dependency of these objects, including the pressure in my fingers holding the pastel and the paper, and held within my body, are part of the drawing that emerges from, rather than leads the intra-action that fashioned it. This type of arts practice de-emphasises the exclusivity of art, in favour of 'ensemble' practices, and transverse communities of creative collaboration (Mary Modeen) that hybridise artists' ways of seeing and making.

This exploration of process enables me as an artist to test and develop co-creative praxes through the mutually implicated states of knowing and being, intertwined with ethics (Barad, 2007). Through this, the concept of the social view forwarded in the work can be conveyed and internalised. I may be well-known in the community, but can never assume that either I, or my ideas, will be

accepted. I approach the development of these (inter-)relationships from a situated position. I have come to understand that my ability to connect is greater when I am embedded on both ‘sides’ of community – that is, as a *local inhabitant*: subordinate and implicated in common issues and concerns; and, as an *outsider*: community project designer/leader, researcher and arts practitioner. The additional capability of having ‘deep listening skills’, enables me to draw connections and translate information that assists the discussion around ‘community understanding’. This is useful when it comes to matters such as how human activity is changing the climate and natural systems that affect the community locally.

Where artists with ‘ensemble practices’ get involved in the ongoing shaping of place through creative projects about the normal business of life, they employ conscious aesthetic approaches that coalesce around relationships with various human and non-human agents participating in equivalent shaping processes. While art plays a role in thinking critically about and raising awareness on issues that affect humans and their environments, eco-social art can strategically facilitate ecological and social regeneration, offering up new ways to apprehend life-sustaining actions by establishing and recovering beneficial principles and practices. However, these future orientations relevant to caring for isolated places and their communities will only be sustainable if facilitated through dialogic engagements embraced by a listening paradigm. Being ‘listened to’ is vital to us all, but particularly for geographically defined and contained communities like those on the islands of Uist, where historically experiential, intergenerational and inherited knowledges may previously have been disregarded or devalued.

What agency is there in listening? Through a durational and emplaced practise, the intervention of a listening paradigm can influence feelings of connection and motivation, becoming a means to draw others into discourse and activities that benefit communities. It may also influence development of new co-creative artistic practices that can assist society to transition towards a culture of intra-connectedness across human and non-human realms. Co-creative listening approaches enable participation in an unfolding process that discloses

autonomous knowledges and communal wisdom. When combined with an artistic approach, this method acts in spaces of the everyday to reengage multispecies connections; develops understanding of mutuality, like-mindedness, and kinship; and, negotiates the personal, social and political realm of the individual and the collective — in place. Of course, it is not all plain sailing though. Discordant or opposing needs arise out of these engagements too. Communities are not homogenous: where there are people, there is conflict. During this project, I have dealt with examples of how difference does not need to be quashed and can instead provide useful tension to find a better solution. There is much to be gained by listening to difference and finding a way to take the benefit from experience, acknowledge wisdom, and then collectively undertake positive action.

In this way, artists can help communities to revitalise themselves through art and cultural activities, and do this best when involving local individuals and groups in collaborative, environmentally engaging activities to grow mutual understanding about the locality. When supported by regional organisations and national bodies these kinds of engagements provide critical space to develop more beneficial community projects that introduce more meaningful discourses inclusive of less vocal, less confident members of society. Adopting a listening attitude enables the development of interpretive and participatory responsibilities to emanate from within the community, contributing to eco-social actions that create spaces for engagement and bring environmental projects directly in touch with the public.

7.2 Comparative analysis of collaborative praxes

Throughout this thesis I have referred to the presence and value of community embodied knowledge and its potential as a tool of engagement to shift a community's actions towards an environmentally regenerative future. Based on the two case studies I presented in chapters 5 and 6, I argue that community embodied knowledge is accessible even to those who do not hold it themselves and has the potential to be taught to practitioners who see the value in using it for ecological and social purposes. Used in this way, community embodied

knowledge can advance new understandings of how to revalue and reintroduce traditional community practices that allow for regenerative, co-creative and eco-social action.

In the first case study, I am a known and trusted member of the community, in the second I am a stranger to the organisation and the community – yet present in both as an ecologically and socially motivated artist. These experiences take place in quite similar community projects, each with eco-social restoration concerns, both administered by locally-run, third sector organisations, and funded through various local and national bodies to develop connected, resourceful, and healthy families, neighbourhoods and communities. They do, however, represent very different communities – one island-based, rural, with a small, geographically widespread population, the other suburban, with a high density of population, located alongside a 65-hectare native forest. I saw these projects as a chance to test out my theories on the value of community embodied knowledge to eco-social regeneration. Although these two projects are not strictly comparable, I will use my 3-month residency with the Auckland-based project as a lens to help me explore whether or not the nature of my eco-social approach in Uist is transferrable as a praxis. I will begin by recapping on the two case studies.



Figure 7-2 *Meeting Ground 2019* [16:10] HDV video still

7.2.1 Uist-based Projects

The major part of my research involved leading the development of the Scottish Government's Climate Challenge Fund (CCF) Projects – *Local Food for Local People* and *Grow Your Own Community*. These were designed to provide co-learning opportunities for the community to set up and run food growing hubs across the island chain. The purpose was to directly reduce CO₂e created through food miles and food waste, by encouraging the increase of local food production and teaching better eating strategies that wasted less food, as well as improving Climate Literacy (understanding human influence on the climate, and vice versa). This work took place at several community organisations' sites and established some new ones, working with existing groups to develop CO₂e reductions outcomes.

The *Grow Your Own Community* initiative was an off-shoot of the main projects, and came about in response to some new issues that had not been catered for in the original project design. These encompassed specific problems voiced by the community regarding social and geographical isolation, poor diet, and mental and physical health and well-being issues. It became an imperative for these outlier communities that we overcame their lack of access to materials, skills and growing spaces, by developing ways to improve their situation. I wanted to explore how eco-social art could become an agent of social intervention, community building, and cultural change, but rather than direct this process, I found it to be more effective to create spaces instead, where community members could become involved through an open-call process of self-nomination.

As outlined in the detailed project review in Chapter 5, this strategy of listening to, engaging with, and responding to community embodied knowledge, proved successful and was sustained across the three consecutive CCF projects. It was an ambitious, and risky strategy that relied on close listening and dialogue, and demonstrated, through the subsequent co-created development of six community polycrubs that participants' experiences, concerns and ideas had been heard and acted on. The community felt they had influence and could direct the decision-making process. As a result, they became more invested and started to

have their own Climate Conversations, leading to transformative, climate-aware actions that they decided upon and managed themselves. This experience is presented in the *Meeting Ground* exhibition (20 Sept – 3 Nov 2019, at Taigh Chearsabhagh Museum and Art Centre, North Uist).

7.2.2 Kaipātiki Project

The Auckland-based Kaipātiki Project has a mission to regenerate local environmental systems. This community-led project has been running for twenty-one years and came about as a communal response to environmental damage that was created through new road developments and the building of the Auckland Harbour Bridge, at the time. The informal project formed into a Trust, developed its own native species plant nursery, and continues to work closely with a broad cross-section of the community to develop their work. This includes teaching regenerative environmental practices, which integrates ecological knowledge with practical strategies for conservation. I took up the chance of an artist-in-residence placement with Kaipātiki Project, because I felt that their regenerative approach to working with community and environment seemed to offer an ideal situation to further test out my own eco-social art approach. It would take place in a setting where I was not part of the community, and culturally, was a stranger too.

My 3-month period as resident artist involved collaboration through close working with the project team to find ways to contribute creatively, as well as expand my understanding of the underpinning Māori knowledge paradigm Kaupapa Māori Theory (KMT), by experiencing it in practice at community organisation level. With support from my mentor, Sam Tu'itahi (Kaipātiki's Community Activation Officer) I developed creative community engagements that were responsive, adaptive and attuned to the local situation, and in alignment with the indigenous KMT framework.

The key work they were undertaking at the time, the Awataha Greenway Project,²⁰⁰ in Northcote (a suburb of Auckland), involved developing a new green ‘corridor’ along the route of the Awataha Stream. This stream was to undergo a process of ‘daylighting’ – a strategy for restoring previously enclosed water courses by removing obstructions and returning it to a more ecologically-natural condition, reducing peak flows and flood risks.²⁰¹ The natural tendency for streams to overflow after heavy rain, is greatly restricted in the urban context where the high monetary value placed on built-upon land reduces capacity for natural flood plains or soakaways to exist. The expanded sense of ‘Daylighting’, as a process of allowing natural light in, can also be thought of metaphorically in the sense of a ‘dawning on humanity’ that their efforts to control natural elements, such as waterflow, have contributed to increasingly challenging consequences in the form of urban flooding.²⁰² Successfully managing urban streams is specialised, technically complex and labour-intensive work, requiring essential understanding of stream ecology and horticulture. It also requires knowledge of community activation to ensure supply of volunteer labour to undertake the physical restoration work, but also as a body to whom to teach stewardship techniques to.

These aspects are all provided by the highly skilled and experienced team at Kaipātiki, who are quietly led by the chairperson of the Board, Charmaine Bailie. A Māori resident, she has been involved with the project for over twenty years. She undertakes much of the teaching around restoration and regenerative practices, and I was fortunate to capture some of her expertise on video. This has formed the main component of an exhibition I have put together

²⁰⁰ Northcote Development The Awataha Greenway Project
<https://northcotedevelopment.co.nz/blog/the-awataha-greenway-project/> [Accessed 28.07.19]

²⁰¹ Naturally Resilient Communities: Daylighting Rivers and Streams
http://nrcsolutions.org/wp-content/uploads/2017/03/NRC_Solutions_Daylighting_Rivers.pdf [Accessed 18.07.19]

²⁰² Auckland Council (2013) *Caring for Urban Streams – Guide 1: Flooding*
<https://www.aucklandcouncil.govt.nz/environment/stormwater/docsbmpenvironmental1/caring-for-urban-streams-guide-1-flooding.pdf> [Accessed 22.09.19]



Figure 7-3 Charmaine Bailie

entitled *Re- Generation*,²⁰³ (08 – 30 September 2019, at NorthArt, Northcote, Auckland) which presents the teaching work required to inspire and educate would-be volunteers in regenerative planting practices. Bailie advocates an enlightened but slower, more painstaking approach to this labour-intensive work, which encompasses holistic and mindful practices that guard against creating more damage in the effort to redress environmental balance.

7.2.3 Reflection

Over the course of the residency, I began to appreciate Bailie’s influence on the way that the organisation is run. There is an approach here that works cross-culturally, inclusively and collectively, with a deliberate strategy to avoid leaving anyone out, or causing offence through making cultural mistakes, deliberately drawing from the underpinning praxis of KMT. It was heartening to observe, in this busy organisation, that the pressing urgency of business and volume of activity do not erode this method of engagement.

My presence in the organisation had an unexpected outcome, as I was made aware of by staff when I was leaving. This centred around the level of

²⁰³ Donkers, L. (2019) *Re-Generation* 11:10mins available to view at Vimeo <https://vimeo.com/354417506>

interest I had shown in their working practices, ecological expertise, and the manner in which they cared for and supported their volunteers, and was instigated, no doubt, by my presence there as a stranger seeing their practices with fresh eyes. Intriguingly, my enquiries seemed to also open up their own thinking on the importance of such specialist knowledge and mindful, holistic care of both the human and non-human community. I had been welcomed to the Kaipātiki Project because the manager I had first met understood that my eco-social practice embodied their own values of respectful working and learning together. However, I, in turn, had to experience their working practices myself before I could start to fully appreciate the extent to which their approach mapped onto my own. My temporary creative position on the team helped to expand community engagement activities, providing opportunities to partner, co-create and explore creative ideas and knowledge development. In fact, it turned out to be quite a reciprocal learning experience for both parties.

Experiencing being a stranger again has reminded me of the importance of seeing afresh the valuable, everyday knowledge that people hold. We employed this embodied, interconnected knowledge throughout the course of designing and delivering the Uist-based projects, but this is perhaps not apparent to unaccustomed eyes. One cannot be directed to go and draw from this knowledge without an understanding of who has it, what it is used for, how it is to be used, and perhaps most importantly, how to ask for it. This facet of communication was demonstrated time and again in both locations, but without sufficient awareness or schooling of its presence and potential value these delicate connections can be trampled as easily as the native seedlings on the forest floor (see *Volume 1: Re- Generation*). Time is a vital aspect to cater for when drawing on this knowledge, which can highlight cultural differences in a very pronounced manner, as its value can be dismissed as too time-consuming to employ in busy work schedules.

7.3 Resynthesis

In this final section, I am going to resynthesise the separated elements of my thesis by describing how the *Meeting Ground* exhibition encapsulated the elements

of what an ‘ensemble practice’ entails, aspires to and delivers, and propose further avenues for research and development of this practice. The mesh of accounts discussed in the preceding chapters explored the agency of ecological and social embeddedness, and how this develops the practice and identity of environmental artists who work in community settings, particularly where they adopt a listening approach that enables communities’ embodied knowledge to emerge. Practical workshops helped people improve their understanding of carbon emissions and climate change, and collaborative participation in artistic activities helped the co-creation of both social and ecological outcomes.

The *Meeting Ground* exhibition approaches the subject of community growing projects in an interesting parallel with the Māori perspective on community practices. The central premise of this exhibition was to show the importance of coming together as a community. The way this works in most cultures is through meeting up in formal and informal ways. The title of this work comes from a description of the Māori term *Marae* as the focal point of their communities, ‘a place to belong, hold meetings and other important social events such as celebrations and funerals’.²⁰⁴ A primary reason why the *Grow Your Own Community* projects have been successful is because the groups came together out of mutual interest, developed ways of working together, and were able to sustain this by overcoming problems as they appeared. The community of growers rose to the challenge of working in a confined space with people they may not have known particularly well, to do something they aspired to - growing their own produce. So, while the emphasis was on the growing activity, they could not achieve this successfully without also attending to the needs of the group. This was alluded to in the incorporation of the two long benches as the key focal point of the installation: literally, a ‘meeting space’ for visitors to the gallery, and ‘attending to’ the development of good, human relationships through ‘face-to-face’ conversational and dialogic engagements.

²⁰⁴ *Marae* <https://www.newzealand.com/int/feature/marae-maori-meeting-grounds/>

Communities need common spaces to be seen in and to meet others, to review and take stock of their work, activities, and progress. The Community Meal on the opening night of the exhibition, provided such a space, where people came out to review the visual presentations but also share experiences, discuss growing successes and generally enjoy the conviviality of being part of a novel 'growers movement'. Attendance at, and contributing towards the community meal, also encouraged them into the gallery, where they could collectively view and recognise themselves in what they had collaboratively and creatively achieved together. The constituent parts of the *Meeting Ground* exhibition provided an example of unseen factors that are not possible to express in a written-only thesis. An experiential exhibition of this scale enabled different subjectivities to crystallise in the minds of viewers, conveying local knowledges on survivability, skills of guardianship of the land, and how this can promote living a more creative life, in more resilient communities. Although, perhaps most importantly, this exhibition afforded the space to best express the supportive, enthusiastic soul of the community as an example and beacon to others.

No part of such a co-created exercise can come to fruition without support, input, and zeal from a myriad of people. Plans were outlined, challenged and developed through several embryonic stages, with supervisors, polycrub growers, managers, board members, gallery officers, university technicians, graphic designers, neighbours and family members that would eventually conclude in the production of an art exhibition. This process expresses an 'ensemble way' of working, and is, according to my experiences in Uist and in Auckland, how so much is achieved in society yet remains under-acknowledged. Despite its potential for conflict, contestation and fracture it draws deeply from peoples' innate understanding of each other and each interconnection through networks, creativity, enthusiasm, and willingness to collaborate. And, underpinning all of this lies a 'sense of timing' that is contextually, culturally and politically specific.

7.3.1.1 The Film - Meeting Ground

The film shows the different sites of the various polycrubs, and the demographics of the groups in each area. <https://vimeo.com/360778033>
(It is important not to mis-read these video presentations as artworks in and of themselves but as part of a whole transferable language that communicates the complexities of experience intrinsic to each specific community.)

7.3.1.2 The Exhibition - Meeting Ground

The theme of the exhibition promoted the value of the polycrubs to the Uist community. It was entitled *Meeting Ground*, and consisted of:

Video projection

2 x 23x4500mm long benches (re-used polished, ex-fish farm timbers)

6 x back-lit digital photographs (A3-sized)

A 1000-word essay available as a hand-out, entitled: *Addressing climate change with communities* (appendix 2)

7.3.1.3 Community Meal

The exhibition opening night was planned for 20th September 2019, and would present the first public showing of the video, and included a Community Meal to be held in the gallery space itself. To simplify catering matters, it was agreed to hold a 'pot-luck' supper. In the promotional material (appendix 3), each attendee was asked to provide one small dish that ideally would be made from some of the produce grown in the polycrubs, or from local gardens. The *Meeting Ground* exhibition opened on Friday 20th September, the first day of the Global Climate Strike,²⁰⁵ and without any overt signposting, this became the undertone of discussion during the evening's proceedings. In the context of the gallery environment this gesture created the kind of *imaginary shift* that is necessary to

²⁰⁵ *Global Climate Strike* 20-27 September 2019: '7.6 million people took to the streets to strike for climate action. The biggest climate mobilisation in history. From Jakarta to New York, Karachi to Amman, Berlin to Kampala, Istanbul to Québec, Guadalajara to Asunción, in big cities and small villages, millions of people joined hands and raised their voices in defence of the climate.' <https://globalclimatesstrike.net/> [Accessed 23.10.19]

transform thinking about taking civic action. The Global Climate Strike was no longer just an image on the news but could be understood as an action in the consciousness of the people who had been engaging with the food growing projects, but who might not have realised until that moment that they had also become activists.

7.3.2 Reflection

While in Auckland, I came across the Māori term *ihi*,²⁰⁶ understood as ‘a beam of light’ present in people, which I think perhaps best references an essential force within communities. In the *Meeting Ground* exhibition, the back-lit group portraits seek to convey this psychic energy, which I consider underlies each network, collaboration, and engagement. It is not easy to work within the presence of *ihi*, but to be ignorant of it, fail to acknowledge it or incorporate it, leaves community projects lacking the key element to stimulate, attract, and influence their communities to become involved in work that can help to sustain and regenerate them at this time of ecological crisis. Furthermore, as seen in the video, *Re- Generation*, an example of this is inherent in the way that Bailie tells the volunteers that they can take the time for *karakia*²⁰⁷ or prayer. While it cannot be defined exactly, recognition of the value of ‘the numinous’ is an area for possible future research into the essential, important but intangible qualities present in lived experience and community embodied knowledge.

The next and final chapter will conclude my thesis by setting out how artistic eco-social strategies have been used to nurture new understandings of traditional community values and practices as a method to engage communities. It defines the area of new knowledge that has been developed, and proposes outlets for this research that include training programmes and policy change.

²⁰⁶ *Ihi* description in the Māori Dictionary

<https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&keywords=ihis> [Accessed 29.08.19]

²⁰⁷ *Karakia* in the Māori Dictionary

<https://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=karakia> [Accessed 29.08.19]

Chapter 8: Conclusion

This research has shown that in rural communities, extensive capacities, interconnections and networks are already present among the people. The inherent and developed creative capacities of artists makes them able to capitalize on this to expand the potential of community projects. Working collaboratively in this way means projects can go beyond measurable outcomes to build enthusiasm and excitement for taking action, developing and being part of initiatives that help communities help themselves. It can also help to overturn the depreciatory view that some communities experience regarding the insignificance of their cultural knowledge. This begins with recognising the importance of upholding communities' valuable interconnected wisdom and deep connection to place, and how they instinctively comprehend their environments as life-sustaining. Finding a way to work that respects and endorses their knowledge is key to developing a good working relationship in a manner that is sustainable and regenerative.

Here, the audience is not a passive consumer of the artist's vision, but co-contributor in a co-creative and co-participatory platform. The provision of collaborative space is vital in this regard to enable focussed discussion and ideas sharing, where listening to and consideration of the opinions of others takes place, allowing differences and doubts to surface that affords the co-creation of something authentic and original to emerge. Someone who is able to listen with an open mind reveals their willingness to be influenced by what they hear. This can seem to leave the listener overpowered by the other, but it is this very display of vulnerability that enables other participants to expose their vulnerabilities too. The artist as effective listener, in considering the merit of the other's view, is better able to reflect on their own as well.

Eco-social artistic approaches benefit the communities they serve by advocating for community knowledge and practices to be included in project design and delivery. This helps to share important knowledges and practices, but also builds up the community's confidence in their own knowledge and skills,

further advancing the collective voice. Additionally, this practice enables new artistic approaches to be tested as a means to consciously examine the function and meaning of art in society. By acting as initiators, catalysts, or activators eco-social artists can help to highlight important community and environmental knowledges to generate a more inclusive approach to addressing societal issues, including growing awareness of climate change, and in the process expand the potential of what art can do.

8.1.1 Research Objectives

This practice-led doctoral research project sought to develop new understandings about artistic practice by showing that if artists working in environmental and/or socially-engaged practice understand the value that lies within community embodied knowledge they will be able to design and facilitate more relevant interconnected projects that activate the community. This research also considered the interpretive and participatory elements of practices that involve others (communities, as well as policy makers, community organisations, national bodies) in discourse and activity on eco-social sustainability matters, through a series of Scottish Government's Climate Challenge Fund projects. These projects emphasised the role and importance of embodied knowledge in the particular marginal community of Uist, Outer Hebrides, UK. Three consecutive, one-year projects helped communities co-create sustainable, meaningful futures for themselves, by employing artistic eco-social methods to design local food growing projects that drew attention to the inter-relatedness that exists across the community to take action on climate change, and used existing embodied knowledges as a tool of engagement.

The purpose in encouraging reflexive reassessment via new thinking-and-doing has been to draw attention to wider issues of ecological concern, by drawing on the communities' existing materials, methods and processes. This relationship is developed through a collaboration that respects knowledges and hierarchies but also introduces an additional 'live presence' mindset that creates awareness of and the need for other knowledges, such as addressing the specifics of climate literacy. Here, the community members are able to step outside of

themselves to join in with the artist's mental/physical construction, and in so doing expand their own 'psychic and socio-environmental' perceptions and skills that reengage their ways of belonging to each other and their land, and as part of a global community. This new climate knowledge becomes embodied and cumulative, drawing from the capacity of the human to know itself through embodied connection to all that surrounds it, and, if we are to address the issues that climate change causes, is something that needs to be reconnected in our psyches too.

8.1.2 Contribution to Knowledge

The primary focus of this research was to advance knowledge about eco-social art practice using the conventional research method of Participatory Action Research modified by Kaupapa Māori Theory (KMT) principles as an integral part of its method to arrive at a new research agenda. This study suggests research into and through art practices that work across environmental and social realms is urgently needed because of the growing acknowledgement of human-induced climate change, and for humans to come to terms with this whilst simultaneously developing practical approaches that shift their behaviours.

KMT was applied here in a novel way through bringing the Māori worldview of interconnectedness and acknowledgement of each other's rights and principles of mutual respect that extend to the nonhuman and environment to a new area, namely artistic eco-social practices that focus on the importance of the collective voice. In this regard, artists intellectual and practical abilities are well placed to develop critical thinking on how to shift behaviours because of their abilities to look at things from all sides and absorb different points of view to develop other ways of seeing, thinking and acting. Through the artist-led projects detailed in this research, it has been possible to show that artists who recognise the value that lies in embodied knowledge are able to develop *useful consciousness* in communities located in specific, ancestral places. These *co-created* projects are *agential* in how they activate dialogue, they engender a desire and a means to raise issues through debate that also create solutions to topics of concern and may go on to spawn follow-up projects.

As a contribution to new knowledge, two sections of this research will be published in early 2020: ‘Deploying community embodied knowledge as a leverage point to re-think how community and organisations can take action on climate change’, published as part of a special feature in the journal *Sustainability Science*,²⁰⁸ entitled *Leverage Points for Sustainability Transformations* (Springer); and ‘Eco-Social Art Practice Advances Collaborative Artistic Co-Creative Methods that Promote Eco-Social Regeneration’, published as a chapter in *Eco-Arts Australis: Using the visual and performing arts to encourage environmental behaviour* (Cambridge Scholars Publishing).

8.1.3 Recommendations

Development of inclusive experiential learning can serve to regenerate interconnectedness in communities affected by ecological and social decline, as well as the growing impacts of climate change. Eco-social artists are able to respond to problems, propose solutions, initiate and re-direct focus, meaning and accountability and can also transform perspectives towards collective visions by working with adapted forms of conceptual indigenous approaches, such as Kaupapa Māori Theory. To this end, this research has the capacity to be developed as a training programme to teach artists, students, local and national organisations to understand how to work more inclusively and complementarily with communities that validates and extends their existing knowledges.

New knowledge based on appreciating the relevance of local expertise has operational significance for artists who undertake to design and lead community projects that develop understanding of the need for communication methods that can capture the complexities of experience, through the delivery of *performative actions*, rather than *representations* or *interpretations*. A new cognisance such as offered by this research will enable them to understand how to blur the usual artist/audience boundary and develop more strategic, eco-social approaches

²⁰⁸ Sustainability Science ‘probes interactions between global, social, and human systems’ <https://link.springer.com/journal/11625>

that align closely with locally lived experience, thereby engaging the population from an informed and inclusive perspective from the outset. This necessitates the provision of collaborative spaces for focussed discussion and ideas sharing but paramount to the process is a listening mindset that enables opinions, airing of differences and doubts, and expression of underpinning knowledges to emerge through dialogue.

This important process is as much about voicing relationships with land and status, as it is about finding strategies to challenge pejorative cultural stereotypes with positive stories of sited and intergenerational connectedness. As a measure to quickly shift mindsets and instigate the urgent actions that are required at this time, further dissemination of this knowledge might help other grassroots organisations to start their own regenerative actions that are substantially different but based on their own local knowledges and needs. In addressing human-induced climate change and the urgency to reduce CO₂e, there is scope to suggest that policy-making might be changed at a larger scale to catalyse and support vital regenerative capacity building within living landscapes such as these, which can empower other communities and wider society to ‘re-think’ how to take action locally.



Figure 8-1 Community Polycrubb, Berneray Open Day, 2016

Timeline of PhD related activities

2015 April	CCF Project lead begins: <i>Local Food for Local People CCF-3812</i>
June	Start of PhD: School of Humanities, University of Dundee (Part time): Training: SGSAH Summer School
September	Training: OPD, Dundee Exhibition 1: <i>Tha mi a bruadair. (I am Dreaming)</i> Faith in Paris, Raising Farmers Voices in Paris, ArtCOP21, Paris, France
October	Artist-in-residence: DRAWinternational, France
November	Conference Presentation 1: <i>Wall-Paper-Plant: Putting Agential Realism into Practice</i> 'Matter Matters' Symposium, Leeds University/Land2, UK
2016 January	Training: OPD, Dundee
March	Writing: <i>CCF-3812 Final Project Report</i>
April	New CCF Project begins: <i>Local Food for Local People CCF-4744</i> Writing: <i>Uist Growers Almanac</i> (Publication)
May	Conference Presentation 2: <i>The Monument Game (2016)</i> Memory, Identity and Landscape – Geographical Perspectives, Conference of Irish Geographers DCU, Dublin, Republic of Ireland Exhibition 2: <i>Monument Game</i> (video installation). Worlding Place, Art and Geography Exhibition at Conference of Irish Geographers, DCU, Dublin Conference Presentation 3: <i>The Monument Game (2016)</i> (Performance) 'True North' Conference, Timespan, Helmsdale, Scotland
June	Artist-in-Residence: DRAWinternational, France
September	Transfer PhD: DJCAD School of Art, University of Dundee (Part-time) Training: OPD, Dundee Exhibition 3: <i>You are not outside (drawing installation)</i> Weit Genug (Far Enough), Kultursentrum Klosterkirche, Angemunde, Germany Research Leave: NZ (4 weeks)
October	Exhibition 4: <i>Sewing Wildflowers</i> Museum nan Eilean, Lionacleit, Isle of Benbecula
November	Conference Presentation 4: <i>Being in Place</i> Post Graduate Researchers Conference with Land2, Duncan of Jordanstone College of Art & Design, University of Dundee, Scotland Training: SGSAH 'The Stuff of Research' Material Culture Training: OPD, Dundee
2017 January	Training: OPD, Dundee
February	Training: SGSAH 'The Stuff of Research' Material Culture Training: OPD, Dundee Research leave: NZ (8 weeks)
March	Writing: <i>CCF-4744 Final Project Report</i>
April	New CCF Project begins: <i>Grow Your Own Community CCF-4968</i>
May	PhD Upgrade exam
June	Training: SGSAH Summer School
July	Artist-in-Residence: Schwedt, Germany
August	Exhibition 5: <i>Wasserwirtschaftliche (Water management)</i> . Spurensuche (Traces), Galerie am Kietz, Germany
September	Conference Presentation 6: <i>The Mutable Book: Intra-Leaving & Sewing Wildflowers</i> ASLE-UKI & Land2 Conference 2017: Cross

	Multi Inter Trans. Biennial Conference of the Association for the Study of Literature and the Environment (UK and Ireland) Training: OPD Exhibition 6: <i>Entangle Edge and Surface</i> (Artist book collaboration with Jan Johnson) 'In the Open', Sheffield Institute of Art, Sheffield
October	SGSAH AHRC Creative Economies Studentship (Full-time) Conference Presentation 7: <i>Drawing Without Representation</i> LangEnact II Meaning without representation: grounding language in Sensorimotor coordination, Southern Denmark University, Odense, Denmark
<i>November</i>	Conference Presentation 8: <i>Drawing Rooted in the Terrain</i> . New Perspectives on Landscape, St Andrews University
<i>December</i>	Workshop: <i>Locating Place Through Local Knowledge</i> Contemporary Visual Art in Lorne, Oban, Scotland
2018 <i>January</i>	Research Leave: NZ (4 weeks)
<i>February</i>	Conference Presentation 9: <i>The Monument Game (2017)</i> TRANS CULTURAL EXCHANGE International Conference on Opportunities in the Arts: Exploring New Horizons, Quebec City, Canada
<i>March</i>	Training: OPD, Dundee Writing: <i>CCF-4968 Final Project Report</i>
<i>April</i>	Conference Presentation 10: <i>Drawing: Knowledge as Process</i> Embodied Experience of Drawing One-Day Symposium 13th April 2018, Ocean Studios, Plymouth UK
<i>June</i>	Training SGSAH 'Action Research in the Field'
August	SGSAH Visiting Doctoral Researcher: Elam School of Art, Auckland (16 weeks)
2019 <i>January</i>	Visit and interview artists in UK and Ireland Agree Writing Timetable with Supervisors. Begin Writing-up
<i>February</i>	Conference Presentation 11: <i>Community Embodied Knowledge as a Leverage Point</i> Leverage Points 2019 Conference, Leuphana University, Lüneburg, Germany
March	SGSAH Student-led Artist-in-Residence: Kaipatiki Project, Auckland (12-weeks extension to SGSAH AHRC Studentship)
<i>May</i>	Conference Presentation 12: <i>Eco-social Practice: Advancing collaborative artistic co-creative methods to promote eco-social regeneration</i> . EcoArts Australis 3rd National Conference, Wollongong, NSW, Australia
<i>June</i>	Conference Presentation 13: <i>Counteracting the Cult of Self: Eco-Socially Engaged Art Practice</i> . Arts in Society 14th International Conference, Lisbon, Portugal
<i>August</i>	Exhibition 7: <i>Apparitions, and Path Drawing 2019</i> Rock-Paper-Scissors. Expanded Drawing Exhibition, Circus Artspace, WASPS Inverness Creative Academy, Inverness
<i>September</i>	Exhibition 8 [NZ]: <i>Re- Generation</i> , NorthArt, Northcote, NZ Exhibition 9 [Uist]: <i>Meeting Ground</i> , Taigh Chearsabhagh Museum and Art Gallery, Isle of North Uist Complete 1 st Draft Thesis for supervisors Complete 'Intention to Submit Thesis' Form
November	Submit Thesis
<i>December</i>	Conference Presentation 14: Paper 1: <i>The Embodied Co-Creative Process of Drawing</i> . Paper 2: <i>Listening to the Community: How co-creative listening approaches can help to develop strategic, eco-social regeneration</i> Ngā Tūtaki – Encounter/s: Agency, Embodiment, Exchange, Ecologies. AAANZ Conference Auckland University, NZ
2020 <i>January</i>	Viva Voca

Appendix 1: Research Ethics Documents



Duncan of Jordanstone College of Art and Design

Dean
Professor Paul Harris FRSA

School of Art & Design Research Ethics Committee
Duncan of Jordanstone College of Art & Design (DJCAD)
University of Dundee
Dundee
DD1 4HN

Laura Donkers
PhD Student

4 September 2018

Dear Laura

Application number: SDAD_18_RPG0120

Title: *Deploying collaborative artistic co-creative methods to strategically promote eco-social sustainability for small island communities*

*Deputy Dean and
Associate Dean (Learning & Teaching)*
Professor Jeanette Paul

Associate Dean (Research)
Professor Stephen Partridge

*Associate Dean (Quality and
Academic Standards)*
Janice Aitken MSc, PGCE, BA Hons
(Fine Art)

*Associate Dean (International)
Joint Co-ordinator of PhD Studies
Course Director (MFA Studies in Art &
Humanities)*
Mary Modeen

School Manager
Fiona Brown FCCA

PA to Management
Pamela Third

I am writing to advise you that your ethics application has been reviewed and approved on behalf of the School of Art & Design (DJCAD) Research Ethics Committee.

Approval is valid for three years from the date of this letter. Should your study continue beyond this point, please request a renewal of the approval.

Any changes to the approved documentation (e.g., study protocol, information sheet, consent form) must be approved by this SREC.

Kind regards

Jeanette Paul
Convenor SREC
Duncan of Jordanstone College of Art & Design

Cc Fiona Fyffe-Lawson, SREC Administrator



UNIVERSITY OF DUNDEE Dundee DD1 4HT Scotland UK t +44 (0) 1382 385251
email p.a.third@dundee.ac.uk | <http://www.dundee.ac.uk/djcad>

UNESCO City of Design Dundee
<http://www.unesco.org/new/en/culture/themes/creativity/creative-cities-network/about-creative-cities/>

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University of Dundee

Ethical Approval for Non-Clinical Research Involving Human Participants

FORM A: Application for ethical approval for low risk projects

Name	Laura Donkers
School	Duncan of Jordanstone College of Art and Design
University e-mail Address	l.donkers@dundee.ac.uk
Title of Project	<i>Deploying collaborative artistic co-creative methods to strategically promote eco-social sustainability for small island communities</i>
Co-Investigators (with organisational affiliation)	n/a
Projected Start Date	20th August 2018
Estimated End Date	1st Dec 2019
Funder (if applicable):	AHRC Creative Economies

Students Only	
Name of Supervisor	Prof. Mary Modeen (University of Dundee)
Degree (e.g. BA, BSc, MA, MSc, MPhil, PhD)	PhD Art

Please provide an overview of the research project providing a short explanation of the issues the project will address and why they are an important area of research.

This doctoral research project is focussed on facilitating long-term sustainability by employing artistic co-creative methods to exhibit the eco-social and cultural importance of embodied knowledge. Knowledge accumulated through lived experience can improve ecological sustainability in small communities (Smith, 2007). Embodied knowledge advances interactions between explicit and implicit knowledge, which link to ethical domains (e.g. Aristotle's term *phronesis*) which are key to shifting mindsets. This research will reveal the role and value of embodied knowledge in a marginal community by employing artistic eco-social methods (Fitzgerald, 2016) to design projects that promote interconnectedness across the whole community (human and non-human).

This project aims to deliver creative strategies that will harness the community's embodied knowledge to develop carbon literacy that can contribute towards delivering sustainable, meaningful futures. The research will predominantly take place on the Uists, a series of islands in the Outer Hebrides, UK. On these islands, an increased reliance upon technology and the devaluing of local practical knowledge has led to communities becoming disassociated from their rural

environment, and intensified contemporary social, economic and ecological challenges (Gould, 2011). Comparative research will take place in NZ to gain perspective on the role indigenous communities with long standing interconnected relationships with their natural environment can play in reversing this trend. This part of the research will focus on Māori concepts of intergenerational knowledge transfer (Te Kanawa, 2012) and self-determination (Durie, 1998), and how these can influence governance of resources and develop flourishing communities.

Donkers is an artist-researcher resident in Uist since 1990. Her practice involves developing an interpretive and participatory position within the community, contributing to eco-social actions, and creating interactive multi-media artworks that record and disseminate the embodied knowledge of that community. She has extensive experience with community engagement projects. Over the last four years she has devised and led a series of Scottish Government Climate Challenge Fund Projects *Local Food for Local People* (2015-17) and *Grow Your Own Community* (2017-2020). She is also a practising eco-social multi-media artist whose work is rooted in the idea of co-creativity, working interactively with communities. The work focuses on understanding how humans affect the world.

What are the aims and objectives of the project?

The aim of this project is to develop and apply a creative strategy, in parallel with the Climate Challenge Fund supported project – *Grow Your Own Community* - to bring the people of Uist, local organisations, and other cultural and change-making partners together in an open-learning environment that supports the sharing of embodied knowledge to shift mindsets. The objective is to use this model project to develop creative engagement tools for other community organisations, local authorities, and public/private funding bodies. In the absence of a guiding theory this project will enable all participants to ask deeper questions about facilitating eco-social change.

Embodied knowledge about environmental sustainability is lost with the ever-increasing modernisation of isolated rural communities. This project mediates this loss. It seeks to help collect and harness this knowledge, and will ask key research questions about its potential uses and the ways in which co-creative artistic practices helps record and disseminate it:

RQ1: How can a community's embodied knowledge contribute to creating an environmentally sustainable future?

RQ2: How can this knowledge be deployed for the benefit of the community and organisations concerned with climate change?

RQ3: How can co-creative artistic approaches help in the recording and dissemination of this embodied knowledge?

Please describe the design of your study and the research methods including information about any tasks or measuring instruments (validated or otherwise) that you will be using. *If you are using non-validated instruments (e.g., surveys or questionnaires you have designed, interview questions, observation protocols for ethnographic work or topic lists for unstructured data collection) please attach a copy to this ethics application.*

An inductive, qualitative research strategy will be applied using a case study research design, drawing on multiple data collection methods including Participatory Action Research. This strategy will examine the nature and role of community embodied knowledge in Uist (UK) and New Zealand and will be structured around two phases.

Phase 1: A broad examination of community embodied knowledge in two stages

Stage 1 of this research will take place at Elam School of Art, University of Auckland, New Zealand. The researcher has accepted an invitation from Associate Professor, Peter Shand, Head of Elam School of Art, to undertake a 4-month period of research under the Scottish Graduate School of Arts and Humanities Visiting Doctoral Researcher Programme. As a visiting doctoral researcher, Donkers will examine the role of Kaupapa Māori praxis in how Elam teaches and supports their students within a contemporary art framework. With guidance from Elam staff (Tuhiwai Smith 2012) interviews will be sought with tutors and PhD students involved in Maori and visual arts education, as well as other notable practitioners and programme leaders at other NZ institutions.

Stage 2 will take place in Uist (UK). Semi-structured interviews will be arranged with members of the community who work in crofting and horticulture, as well as key members of community initiatives.

The interviewees will be selected based on;

- A. Experience in a range of learning environments
- B. Interest in community embodied knowledge as it exists (i.e. where people know each other through familial and experiential ties; are attached to their place/environment/land; and, utilise intergenerational knowledge to understand their own existence).
- C. Interest in community resilience with an eco-social and cultural focus. Specifically, this will encompass two or more aims that relate to cultural knowledge, support for specific social groups within communities, or relating to specific issues.

Data collection will be undertaken using semi-structured interviews, and oral history interviews. This method will be used to elucidate data from individuals in a range of roles. The target number of participants is 20. The interview guide for this data collection is attached (appendix 1).

Phase 2: An in-depth examination of a community project where embodied knowledge contributes towards creating environmental sustainability

This research will take place on Uist (UK). The *Grow Your Own Community* project will be selected for the focus of this phase. This phase of research will apply a modified Participatory Action Research (PAR) approach to examine in depth the eco-social factors that shape the relationship between social capital and environmental resilience at the community level. This approach builds on Dr. Huhana (Susan) Smith's innovative research model, grounded in a kaupapa and tikanga Māori epistemology of knowledge (Smith 2007). These methods gather data on community actions using practice-based methods, such as oral history interviews, group discussions, workshops and exhibitions. These become forms of community engagement, interacting with the creative aspects of the project, drawing on paradigms that illuminate the eco-social relationships of people with their environment.

Phase 2 data collection will be undertaken using a combination of methods. These are:

1. Participant observation will be used to gain critical understanding about the role embodied knowledge plays in decision making. This method will be particularly important in the early stage of phase 2 although it will be used as a method throughout the phase 2 research period. Specially, participant observation will provide preliminary insights which will be explored in more depth during semi structured interviews with project participants. A confidential research diary will be used to record insights and reflections.
2. Semi structured interviews will be used to identify and examine specific eco-social factors that are important in the dynamic between community embodied knowledge, the community organisation and climate change awareness. Repeat interviews (e.g. 3 interviews) will be undertaken with key participants (10). The specific topics for interview will be identified from participant observation.
3. Focus groups will be used in the later stages of the research. This will bring together groups of individuals who have participated in the research. The aim of this is to help validate and examine in more depth different issues and any relationships between them identified from the initial research findings and examine the extent to which embodied knowledge factors in the dynamic between social capital and ecological sustainability. This is likely to involve participatory techniques although this will be agreed with key participants in the focus group design stage.

The target number of participants is 60. The broad topics and issues to be examined in this phase of the research are outlined in appendix 2.

How will participants be identified and recruited? *Please provide details on how and by whom they will be contacted and how they can opt into the research; please also add information on any exclusion criteria should they apply. Please attach the wording of any emails, letters, social media adverts or other written approaches that you may use for recruitment purposes.*

Phase 1: A broad examination of community embodied knowledge in two stages

The target number of participants to be included in this phase is 20. This number allows a sufficient range of individuals to be included from different locations in Uist (UK) and NZ, and different social settings that include both rural and urban contexts. Participants will be identified through discussion with: senior staff at Elam School of Art; staff from the Uist-based community organisation *Tagsa Uibhist*; and, from the researcher's own practice orientated networks (in UK and NZ).

Potential participants will be invited via email to participate in the research project. This will include the research information sheet for Phase 1 to outline research purpose and expectations. A follow up telephone call will be made to explain the project and answer any questions that potential participants might have.

Phase 2: An in-depth examination of a community project where embodied knowledge contributes towards creating environmental sustainability

The target number of participants is 60. This phase will examine the Scottish Government's Climate Challenge Fund *Grow Your Own Community* project based on Uist (UK). It is run by community organisation *Tagsa Uibhist*, a health and wellbeing charity based in Uist with a long track record in successful engagement to identify and meet local community needs. The project aims to strengthen social cohesion and create a low carbon future for Uist by encouraging the growing and consumption of more local food, reducing food waste going into landfill, and through these

<p>activities provide tangible opportunities to improve the Climate Literacy of the community, especially young islanders.</p> <ul style="list-style-type: none"> A. This project is already in its second iteration having secured funding for a further two years in April 2018 B. This project has been designed to show how community embodied knowledge can be employed to successfully deliver key project outcomes on CO₂e reduction. Due to the range of project activities there is sufficient scope to show responses between participants who employ embodied knowledge and those who do not. The project is based in a predominantly urban setting on Uist and supports a number of rural satellite project sites at various geographical locations across the island chain C. Researcher originally designed and setup the current CCF project for the community organisation, <i>Tagsa Uibhist</i>, but has now taken an observational position in order to review and reflect on project activity <p>Focus group participants (a method used in the later stages of data collection in phase 2) will be recruited from existing research participants with direct links with CCF project.</p>
<p>How will you obtain informed consent?</p> <p>Phase 1: A broad examination of community embodied knowledge in two stages</p> <p>Once a number of potentially suitable interviewees in NZ and Uist (UK) have been identified an invitation to participate will be sent out via email. This correspondence will invite the individual to participate in the research. An information sheet will be provided (see appendix 3). This will enable those invited to take part in the research an informed decision on their potential involvement in the research.</p> <p>Once practical arrangements have been made to undertake the interview at a suitable time and place for each participant, a few days before the scheduled interview a follow up email will be sent to confirm details, re-familiarise the participants with the research purpose (appendix 3) and to request formal written consent (see appendix 4).</p> <p>Phase 2: An in-depth examination of a community project where embodied knowledge contributes towards creating environmental sustainability</p> <p>As the researcher has already identified the project to be examined in this phase of the research a meeting with a number of lead actors involved in this initiative will take place to discuss the research process, potential willingness, expectations and feasibility. This will involve face to face verbal communication of all aspects set out on the information sheet (appendix 5). This information sheet will also be provided to the lead actors as a document. Shortly after this a follow up meeting will be arranged to discuss and agree next steps and to gain consent from each lead actor for involvement in the research (see appendix 6 for written consent form for phase 2). At the start of any participant observation events (e.g. committee meetings, site meetings) a verbal explanation of the research purpose and process will be provided to clearly set out the researcher's role and verbal consent obtained from all present. This process will be repeated prior to each formal data collection event (semi structured interviews and focus groups) with written consent obtained from each participant.</p>
<p>Data storage and access</p>

<p><i>Please explain your outcome measures and the type of data you will be collecting, where the data will be stored and whether data has been collected anonymously or has been anonymised for storage, who has access to the data and for how long you intend to keep the data.</i></p> <p>Phase 1 data will generate audio and/or video recordings of semi structured conversations. These recordings will be transcribed using pseudonyms for individuals and initiatives to maintain anonymity in the storage and use of data in the analysis and development of any research outputs. I will use Dundee University's Box System to store the transcripts of the audio/video recorded interview files and destroy the raw audio or video files after transcription is complete, as well as destroying the list of identities so that the interview data may be regarded as anonymous. Phase 2 data will involve researcher field notes and audio and video recordings of individual interviews and focus group discussions. Like the data storage and access set up outlined for phase 1, raw data will be transcribed during which process pseudonyms will be set up and raw data destroyed prior to the transcripts being stored on Dundee University's Box System</p>
<p>Are any other permissions (e.g., clearance under the Protecting Vulnerable Groups Scheme (PVG)) required? If so which?</p> <p>Member of PVG Scheme (current)</p>
<p>Does the research involve fieldwork in or outside the UK? Have necessary risk assessments been carried out? If not, please state when you will be likely to conduct the risk assessment.</p> <p>The research does involve fieldwork outside the UK. A risk assessment for fieldwork in the UK and outside the UK is provided (appendix 7).</p>
<p>Are there any other ethical considerations relating to your project which have not been covered above? If so, please explain.</p> <p>n/a</p>

By signing below, I declare that I have read the University Code of Practice for Non-Clinical Research on Human Participants and that my research abides by these guidelines.

Principal Investigator or student

Name **Laura Donkers** Date **22/05/2018**

Supervisor (if applicable)

Name **Prof. Mary Modeen** Date

Appendix 2: Exhibition Essay

Addressing climate change with communities

Laura Donkers

Even though solid, scientifically proven evidence reinforces a general acceptance that people are causing Earth's climate to change, it remains a complicated and antagonistic issue for the public to engage with.¹ Data, showing how natural influences, such as from the sun and volcanoes,² have also contributed to the increased temperatures, can cloud judgement over the much greater human contribution made through industrialisation and significant human lifestyle changes during the last one hundred years. Simply put, we are consuming too much and polluting too much. Economic growth cannot keep increasing as it is causing irreversible damage to the Earth, and the natural systems upon which we depend for survival, namely soil, water, and air.

Despite how in *Limits to Growth* (1972), Donella Meadows et al, demonstrated that unchecked growth on our finite planet was leading the Earth towards ecological 'overshoot' and pending disaster,³ the unpredictability of precisely how climate change will affect us allows some sections of society to be blasé: the consequences may not be so challenging, or they can be outrun, simply by moving to places that will be less affected.⁴ For rural communities such as those in the Outer Hebrides, however, these options are no longer possible. Firstly, the effects of climate change are already being experienced in the form of sea level rise, coastal erosion, and rising temperatures causing more frequent weather events.⁵ Secondly, while there is some debate over population trends, where a local survey on young returnees⁶ contradicts local authority estimates⁷ that the population is declining, and aging, for the most part, communities on the islands are staying where they are. The lives and futures of the inhabitants are embedded in each other as much in the fabric of the environment. So how might these communities best address the impacts that climate change will have on their lives?

While, major changes involving sea-level rise are largely outside of the community's immediate ability to address, concerns around food production, food quality, food miles, and food security, are well within the bounds of such a group's capacity, particularly where the skills, knowledge and experience to produce food locally are still held within that community. The intention behind the series of Uist-based Climate Challenge Fund projects, was to work with the existing knowledges, lived-experiences and intersubjectivities of the community, to deliver a

programme of activities with a target of CO₂e emissions reductions linked to the revival of local food production and to develop Climate Literacy in the population.

The *Grow Your Own Community* projects offered Uist residents the chance to grow their own food in horticultural facilities, supplied by a community organisation-led collaboration between Tagas Uibhist and Cothrom Ltd, to expand the potential for community learning about the links between growing food and acting on climate change. In June 2016, an open meeting to propose the project, was held on the island of Berneray. A group of five residents came forward who agreed to identify a suitable site for the venture. A site near to a social housing scheme was found and in agreement with the site managers (Hebridean Housing Partnership) the group successfully applied for planning permission. Construction of facilities was completed, a local, skilled grower was recruited to support the group in its first year, and the project began.

By November 2016, an open day was held inviting the community to turn up with ‘a wheelbarrow and a shovel’ to help move 20 tonnes of topsoil into the raised beds, and in so doing attracted additional members to join the group (eventually totalling 14 growers). This established a collective of invested individuals and defined how the group would work within the confines of the 12 x 4 m space to grow a first-year harvest of 140kg. While this achievement was impressive, the additional intangible benefits that contribute towards developing community resilience and self-sufficiency are of greater importance, particularly when they engender climate change awareness too.

It is definitely community building! I have met and talked to Berneray people in the last month whom I had no chance to meet in a deep way before. And I like the two children being around... The little plots are beginning to show life. It is a pleasure. And I especially love the atmosphere, quiet, calming ... and warm on a sunny day...

The polycrub is fabulous! We, as a family, are loving it. Getting totally hooked on what seeds to plant, how to collect water, ways of up-cycling things to benefit the polycrub I think my 5-year-old daughter would live in it. [My husband] has found himself a hobby too. It's just all very exciting. We're all eager for everyone to do well; it has a great community feel...

Berneray Polycrub Members

With the ever-increasing modernisation of isolated rural communities, knowledge about environmental sustainability is becoming lost. This particular project intervened in that process by using art to strategically promote regeneration and stimulate regenerative intra-actions across communities. It tackled the issue of contemporary loss of connection to environment by initiating practical ways to reengage, in this instance, through local food growing initiatives. This approach aimed to rekindle understanding of the importance of traditional community practices such as ‘working together’ and the use of local resources, acknowledging the relationship that exists between humanity and the environment, and in the process developing carbon literacy as a contribution towards a more connected and regenerative future. The creation of these spaces continues to act as a catalyst for eco-social change and community coalition building, rekindling a sense of place, stewardship and public participation, highlighting the importance of the ‘untapped potential’ to be found in community embodied knowledge.

¹ Higgins, P. (2014) *How to deal with Climate Change* Physics Today 67, 10, 32

<https://physicstoday.scitation.org/doi/full/10.1063/PT.3.2548> [Accessed 06.06.19]

²² The Royal Society (2019) Climate Change: Evidences and Causes <https://royalsociety.org/topics-policy/projects/climate-change-evidence-causes/basics-of-climate-change/>

³ Meadows, D., Randers, J., Meadows, M. (2006) *Limits to Growth: The 30-Year Update* Chapter 1 ‘Overshoot’. James & James Ltd, Bath, UK

⁴ Milman, O. (2018) *Americans: the next climate migrants Where should you move to save yourself from climate change?* The Guardian <https://www.theguardian.com/environment/2018/sep/24/climate-change-where-to-move-us-avoid-floods-hurricanes> [Accessed 06.06.19]

⁵ Angus, S. & Hanson J.D. (2004) *Tìr A'mhachair, Tìr Nan Loch? Climate Change Scenarios for Scottish Machair Systems: A Wetter Future?* https://www.researchgate.net/publication/268016300_Tir_A'mhachair_Tir_Nan_Loch_Climate_Change_Scenarios_for_Scottish_Machair_Systems_a_Wetter_Future [Accessed 27.07.19]

⁶ Downey, H. (2018) *Young people turning the tide of island de-population trends* <https://www.ruralnetwork.scot/news-and-events/news/young-people-turning-tide-island-de-population-trends> [Accessed 06.06.19]

⁷ Comhairle nan Eilean Siar Outer Hebrides Fact File: Population Overview (2018) <https://www.cne-siar.gov.uk/strategy-performance-and-research/outer-hebrides-factfile/population/overview/> [Accessed 06.06.19]

Appendix 3: Exhibitions- promotional materials

Meeting Ground

Laura Donkers



Opening Community Meal
20 September, 7:30pm
Taigh Chearsabhagh, Gallery 2

Bring your own small dish of food
to share as part of a potluck supper.

Taigh Chearsabhagh
Gallery 2
21 An t-Sultain | Sept
26 Dàmhair | October



Taigh-Tasgaidh + Ionad-Ealain | Museum + Arts Centre

www.taigh-chearsabhagh.org info@taigh-chearsabhagh.org @Taigh_C



Olligh-sgoil Gàidhealachd agus nan Eilean
Colaiste a' Chaisteil

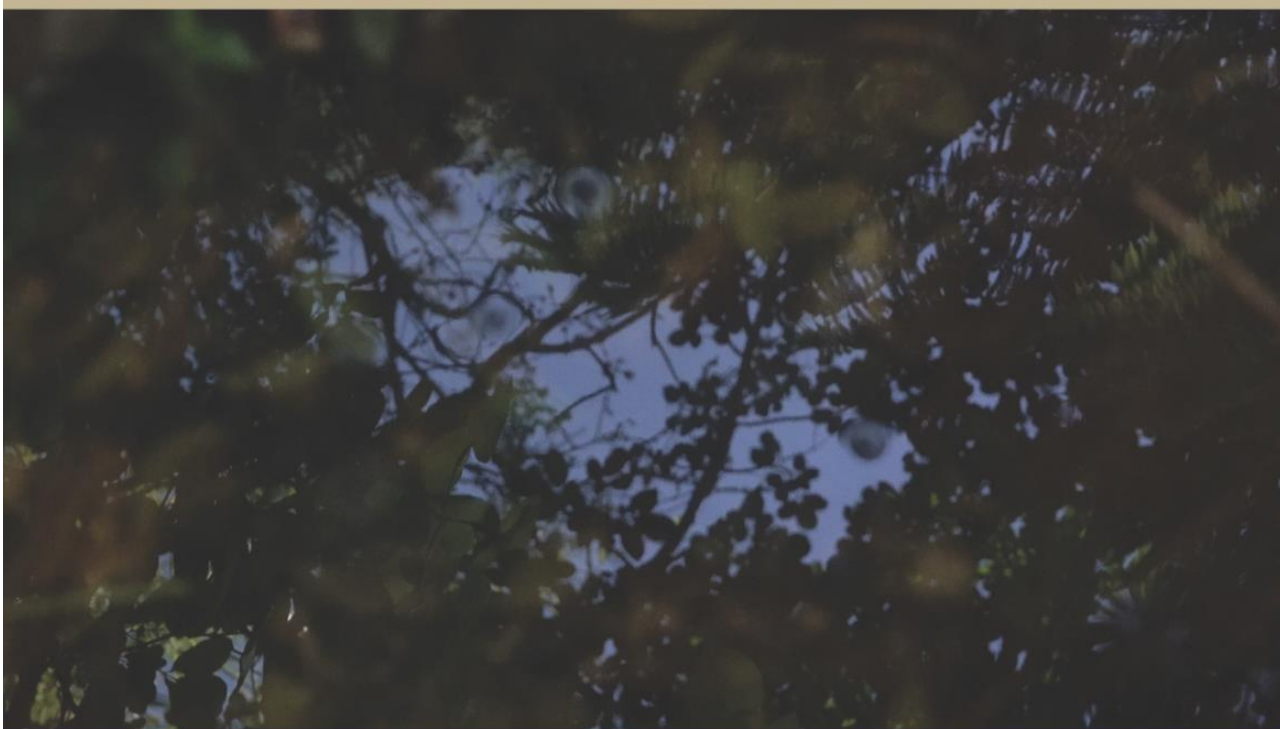
UistFilm



Highlands and Islands Enterprise
Ionaid na Gàidhealtachd / nan Eilean



Loch nam Madadh | Lochmaddy Uibhist a Tuath | North Uist Innse Gall | Outer Hebrides HS6 5AA
Free gallery admission. Disabled Access. Taigh Chearsabhagh Trust is a registered Scottish Charity SC022145



Laura Donkers

RE - GENERATION

- A film made during a Community Restoration Day carried out as part of the Awataha Greenway Project, at Kaka Reserve (Jessie Tonar Scout Reserve), on Kaka Street, Northcote, in May 2019
- Frottage drawings of native trees made in 2016 at the Okuti Valley Reserve, Banks Peninsula.

9 – 25 September 2019 | Opening: Sunday 8 September, 4pm

image: Still from Re-generation.

NORTHART

Norman King Square, Ernie Mays Street, Northcote Shopping Centre, Auckland
www.northart.co.nz | www.facebook.co.nz/northartgallery | Instagram (@northartnz)
 Open daily during exhibition 10am - 4pm (Closed public holidays) | Ph 09 480 9633



Bibliography

- Alaimo, S. & Hekman, S.J. (Eds) Material Feminisms Barad, K. (2008) *Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter*. (pp 120-156). Bloomington, Indiana University Press
- Arlander, A., Barton, B., Dreyer-Lude, M., Spatz, B. (2017) *Performance as Research Knowledge, Methods, Impact* Chap 6 'Agential cuts and performance as research' p 135 Routledge, London
- Baker, J. A. (1967) *The Peregrine* Penguin Books UK
- Barad, K. (2003) *Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter*
https://www.uio.no/studier/emner/sv/sai/SOSANT4400/v14/pensumliste/barad_posthumanist-performativity.pdf [Accessed 13.05.19]
- Barad, K. (2007) *Meeting the Universe Halfway* Duke University Press
- Barad, K. (2012) *Nature's Queer Performativity*. Kvinder Køn og Forskning 1-2: 25-54 https://www.academia.edu/1857572/Natures_Queer_Performativity_the_authorized_version [Accessed 13.05.19]
- Barrett, E. and Bolt, B. Eds. (2007) *Approaches to Creative Arts Enquiry* I. B. Tauris & Co. Ltd, London
- Bennet, J. (2010) *Vibrant Matter. A Political Ecology of Things* Duke University Press
- Berger, J.J. (1990) *Environmental Restoration: Sciences and Strategies for Restoring the Earth* Island Press, USA
- Bishop C. (2012) *Artificial Hells: Participatory Art and the Politics of Spectatorship* Chap. 9 'Pedagogic Projects: How do you bring a classroom to life as if it were a work of art?' Verso, London
- Bohm, D., Nicol, L. ed. (1996) *On Dialogue* Routledge, London.
- Bourriaud, N. (2002) *Relational Aesthetics* Les Presses du reel, France
- Corradi Fiumara, G. (1995) *The Other Side of Language: A Philosophy of Listening* Chap 10 'Midwifery and Philosophy' Routledge, Oxon
- Crisp, R. (Ed) (2000) *Aristotle. Nicomachean ethics* Cambridge University Press, Cambridge. http://assets.cambridge.org/97811070/39605/frontmatter/9781107039605_frontmatter.pdf [Accessed online 28.12.18]
- De Certeau, M. (1984) *The Practice of Everyday Life* University of California Press, California
- Donkers, L. (2016) *The Uist Growers Almanac the natural way to grow* Elite Publishing Academy UK.
- Elkins, J. (2012) *What Do Artists Know?* The Stone Art Theory Institute: Volume Three. Penn State University Press, US
- Ghosh, A. (2017) *The Great Derangement Climate Change and the Unthinkable* University of Chicago Press
- Goody, J. (1977) *The Domestication of the Savage Mind (Themes in the Social Sciences)* Cambridge University Press <http://neamathisi.com/literacies/chapter-1-literacies-on-a-human-scale/goody-on-the-differences-between-orality-and-literacy> [Accessed 15.04.19]
- Gruovnik, T., Mendieta E. & Lenart Škof, L. (eds.) (2018) *Borders and Debordering: Topologies, Praxes, Hospitality* Chap 2 Mary Watkins 'From Hospitality to Mutual Accompaniment: Addressing soul-loss in the Citizen-Neighbor' pp25-40. London, Lexington Books
- Haraway, D. (2016) *Staying with the Trouble: Making Kin in the Cthulucene* Duke University Press
- Harper, D. (1987) *Working Knowledge. Skill and Community in a Small Shop*. The University of Chicago Press, Chicago

- Harrison, H&N (2016) *The Time of the Force Majeure: After 45 Years Counterforce is on the Horizon* Prestel UK
- Hess, C. & Ostrum, E. (Eds.) (2007) *Understanding Knowledge as Commons from Theory to Practice* MIT Press, Cambridge, Massachusetts & London
- Hinds, J. & Sparks, P. (2009) *Investigating environmental identity, well-being and meaning* Sheffield Hallam University Research Archive (SHURA)
<http://shura.shu.ac.uk/5398/> [Accessed 26.08.19]
- Hoskins T K, Jones, A. (2017) *Critical Conversations in Kaupapa Māori*. Chap 4 'Non-human Others and Kaupapa Māori Research' Huia Publishers Wellington
- Howden-Chapman (2018) *Counterfutures: Left thought & Practice Aotearoa* FIVE
<http://counterfutures.nz/5/Howden-Chapman.pdf> [Accessed 23.10.19]
- Ingold, T. (1993) *The Temporality of the Landscape*
<https://quote.ucsd.edu/sed/files/2014/09/Ingold-Temporality-of-the-Landscape.pdf> [Accessed 20.10.17]
- Jagodzynski, J. and Wallin J. (2013) *Arts-Based Research: A Critique and a Proposal* Springer Science and Business Media Sense Publishers
- Kagan, S.J. (2011) *Art and Sustainability: Connecting Patterns for a Culture of Complexity* Transcript, Verlag
- Kagan, S.J. (2014) *The Practice of Ecological Art* Institute of Sociology and Cultural Organization, Leuphana University, Lüneburg
https://www.researchgate.net/publication/274719395_The_practice_of_ecological_art [Accessed 17.04.19]
- Kester, G.H. (2011) *The One and the Many: Contemporary Art in a Global Context* Duke University Press
- Latour, B. (2018) *Down to Earth: Politics in the New Climatic Regime* Polity Press, Cambridge
- Macfarlane, R. (2015) *Landmarks* Penguin UK
- Meadows, D., Randers, J., Meadows, M. (2006) *Limits to Growth: The 30-Year Update* Chapter 1 'Overshoot'. James & James Ltd, Bath, UK
- Merleau-Ponty, M. (1962) *Phenomenology of Perception*, Trans. C. Smith. Routledge, London
- Mezirow, J. (1978) *Education for perspective transformation: Women's re-entry programs in community colleges*. New York: Teacher's College, Columbia University
- Mitchell, W.T.J. (1994) *Picture Theory: Essays on Verbal and Visual Representation*. Ch. 1 *The Pictorial Turn*. Chicago: University Press.
- Nicolaïdes, K. (1992) *The Natural Way to Draw* Houghton Mills, Boston
- Noë, A. *Action in Perception* (2006) Ch. 2, p. 40 MIT Press, Massachusetts
- Ong, W.J. (1977) *Interfaces of the Word: Studies in the evolution of consciousness and culture 'I see what you say': Sense analogies for intellect* (pp 121-144) Cornell University Press, Ithaca, NY
- Phelan, P (1993) *Unmarked: The Politics of Performance* Routledge
- Pihama, L., Tiakiwai, SJ, Southey, K. (Eds.) (2015) *Kaupapa Rangahau: A Reader A collection of readings from the Kaupapa Rangahau Workshop Series* Te Kotahi Research Institute, Hamilton Aotearoa/New Zealand
https://www.waikato.ac.nz/_data/assets/pdf_file/0009/339885/Kaupapa-Rangahau-A-Reader_2nd-Edition.pdf [Accessed 20.05.19]
- Smith, B. R., Morphy, F.(2007) *The Social Effects of Native Title: Recognition, Translation, Coexistence*. Chap 11. Barcham, M. *The limits of recognition* pp 203-214 ANU Press <https://www.jstor.org/stable/j.ctt24hd8k.15> [Accessed 11.02.20]
- Smith, L.T. (2012) *Decolonising Methodologies: Research and Indigenous Peoples* 2nd Revised Ed. Zed Books Ltd, London
- Smith, M, Ravetz, A, Senior, R. (Eds.) (2018) *Social Works? Open*. Morrison, K. 'Let's Talk About Ethics' pp36-48 Axisweb & MMU
- Sullivan G. (2010) *Art Practice as Research Inquiry in Visual Arts* 2nd Edition 'Chapter 4: Art Practice as Research'- Pennsylvania State University, USA © 2010 SAGE

- Publications, Inc. https://uk.sagepub.com/sites/default/files/upm-binaries/31775_Chapter4.pdf [Accessed 09.09.18]
- Tilman, D. & Lehman, C. (1987) *Human-caused environmental change: Impacts on plant diversity and evolution* Colloquium Department of Ecology, Evolution, and Behaviour, 1987 Upper Buford Circle, University of Minnesota, St. Paul, MN 55108 <https://www.pnas.org/content/pnas/98/10/5433.full.pdf> [Accessed 23.07.19]
- Tsing, A, Swanson, H., Gan, E., Bubandt, N. (Eds) (2017) *Arts of Living on a Damaged Planet* University of Minnesota Press
- Wilson, E.O. (1984) *Biophilia*. Harvard University Press. Cambridge, Mass.
- Varela, F. J., Thompson, E., & Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience*. MIT Press Cambridge, Mass.

Conference Paper

- Bolt, B. et al (2016) *iDARE Creative arts research approaches to ethics: new ways to address situated practices in action* Proceeding of the 12th Biennial Quality in Postgraduate Research Conference (QPR 2016), Adelaide, South Australia, 20-22 April 2016, pp. 98-105 https://www.academia.edu/29061375/Creative_Arts_Research_Approaches_to_Ethics_New_ways_to_address_situated_practices_in_action [Accessed 29.07.19]
- Lee, J. (2005) *Māori cultural regeneration: Pūrākau as pedagogy*. Paper presented as part of a symposium 'Indigenous (Māori) pedagogies: Towards community and cultural regeneration' with Te Kawehau Hoskins and Wiremu Doherty. <https://www.yumpu.com/en/document/view/6139198/maori-cultural-regeneration-purakau-as-pedagogy-kaupapa-maori> (Accessed 24.07.18)
- Liassiss, N. (1990) *Connotative Dissonance in Communication*. The Ninth World Congress of Applied Linguistics. Cyprus, Greece. ERIC Number: ED323790, Non-Journal <https://files.eric.ed.gov/fulltext/ED323790.pdf> [Accessed 30.08.19]

Journals

- Andersen, R. (2015) *Nature has Lost its Meaning: to solve climate change, we need to reimagine our entire relationship to the nonhuman world* SCIENCE <http://themuseumofflossandrenewal.life/residencies/https://www.theatlantic.com/science/archive/2015/11/nature-has-lost-its-meaning/417918/> [Accessed 16.04.19]
- Angus S. (2014) *The implications of climate change for coastal habitats in the Uists, Outer Hebrides* Ocean and Coastal Management 94 (2014) pp38-43 Science Direct, Elsevier Ltd. <https://www.sciencedirect.com/science/article/pii/S0964569114000490#> [Accessed 14.03.19]
- Angus, S. & Hanson J.D. (2004) *Tir A'mhachair, Tir Nan Loch? Climate Change Scenarios for Scottish Machair Systems: A Wetter Future?* https://www.researchgate.net/publication/268016300_Tir_A'mhachair_Tir_Nan_Loch_Climate_Change_Scenarios_for_Scottish_Machair_Systems_a_Wetter_Future [Accessed 27.07.19]
- Battarbee, K. (2004) *Co-Experience: Understanding User Experience in Social Interaction* <https://aaltodoc.aalto.fi/bitstream/handle/123456789/11462/isbn9515581613.pdf?sequence=1> [Accessed 10.02.2020]
- Breier, M, and Ralphs, A. (2009) *In Search of Phronesis: Recognizing Practical Wisdom in the Recognition (Assessment) of Prior Learning*. British Journal of Sociology of Education Vol. 30, no. 4, pp. 479–493. JSTOR, www.jstor.org/stable/40375445 [Accessed 14.04.19]
- Conkling, P. (2007). *On Islanders and Islandness*. *Geographical Review*, 97(2), 191-201. Retrieved from <http://www.jstor.org/stable/30034161> [Accessed 28.05.19]De

- Bruin, A. (2015) *Keeping a Language alive: the pass and future of Gaelic in Scotland* <https://itaint-necessarilyso.squarespace.com/articles/2015/11/12/keeping-a-language-alive-the-past-and-future-of-gaelic-in-scotland> [Accessed 20.05.19]
- Dickerson, J. L. et al. *The current state of citizen science as a tool for ecological research and public engagement* <https://esajournals.onlinelibrary.wiley.com/doi/pdf/10.1890/110236> [Accessed online 04.04.19]
- Downey, H. (2018) *Young people turning the tide of island de-population trends* <https://www.ruralnetwork.scot/news-and-events/news/young-people-turning-tide-island-de-population-trends> [Accessed 06.06.19]
- Higgins, P. (2014) *How to deal with Climate Change* Physics Today 67, 10, 32 <https://physicstoday.scitation.org/doi/full/10.1063/PT.3.2548> [Accessed 06.06.19]
- Klein, A. (2012). Mousse 34 - Karan Barad *Intra-Actions*. Mousse Magazine (Milan) Interview Published in Special dOCUMENTA (13) Issue of Mousse Magazine (Milan, Italy), Summer 2012 https://www.academia.edu/1857617/_Intra-actions_Interview_of_Karen_Barad_by_Adam_Kleinmann [Accessed 22.09.19]
- Koch, T., Selim, P., Kralik, D. (2002) *Enhancing lives through the development of a community based participatory action-research programme* <https://www.ncbi.nlm.nih.gov/pubmed/11845746> [Accessed 10.11.18]
- Legrand, D. (2006) *The bodily self: The sensori-motor roots of pre-reflective self-consciousness* Phenomenology and the Cognitive Sciences (2006) 5: 89–118. Springer https://www.researchgate.net/profile/Dorothee_Legrand/publication/227257723_The_Bodily_Self_The_Sensori-Motor_Roots_of_Pre-Reflective_Self-Consciousness/links/00b7d51d1ff1815885000000.pdf [Accessed 26.04.19]
- MacDonald C. (2012) *Understanding Participatory Action Research: A Qualitative Research Methodology Option* Canadian Journal of Action Research Volume 13, Issue 2, pages 34-50 <https://pdfs.semanticscholar.org/3b78/ecfe0b4a0a7591d2ea068c71e8ea320ff451.pdf> [Accessed 10.11.18]
- McKinlay, A. & McVittie, C. (2007) *Local, incomers and intra-national migration: Place-identities and a Scottish island*. British Journal of Psychology, 46, 171-190 The British Psychology Society <https://onlinelibrary.wiley.com/doi/pdf/10.1348/014466606X96958> [Accessed 28.05.19]
- McNay, L. (2008) *The Trouble with Recognition: Subjectivity, Suffering, and Agency* Sociological Theory, Vol. 26, No. 3, pp271-296 American Sociological Association <https://www.jstor.org/stable/20453110> [Accessed 11.02.2020]
- Mahukia, R. (2008) *Kaupapa Māori theory is critical and anti-colonial*. MAI Review, 2008, 3, Article 4 https://www.researchgate.net/publication/26569994_Kaupapa_Maori_theory_is_critical_and_anti-colonial [Accessed online 14.11.18]
- Mezirow, J. (1978) *Perspective Transformation* Adult Education Volume: 28 issue: 2, page(s): 100-110 <https://doi.org/10.1177/074171367802800202> [Accessed 15.05.19]
- Miller, D. (2012) *Regenerative Design: An Exploration of Process, Practice and the Role of Planners* <https://open.library.ubc.ca/cIRcle/collections/graduateresearch/310/items/1.0075745> [Accessed 17.07.19]
- Pytko I, Dörfler V, Eden C. *Thinking together: What makes Communities of Practice work?* Hum Relat. 2017 Apr;70(4):389-409. doi: 10.1177/0018726716661040. Epub 2016 Aug 25. PubMed PMID: 28232754; PubMed Central PMCID: PMC5305036. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5305036/> [Accessed 09.05.19]

- Ryan, L.A. (2015) *Performing agriculture: The "Survival Pieces" of artists Helen and Newton Harrison* Conference Paper: Association for Environmental Studies and Sciences, At San Diego, California
https://www.researchgate.net/publication/291559175_Performing_agriculture_The_Survival_Pieces_of_artists_Helen_and_Newton_Harrison [Accessed 17.04.19]
- Schwartz, A.B. (2016) *Perspective Movement: How the Brain Communicates with the World* Cell Press Vol 164, Issue 6, PP 1122-1135 Science Direct, Elsevier
<https://www.sciencedirect.com/science/article/pii/S009286741630188X> [Accessed 16.05.19]
- Te Kanawa, K. (2008) *Mai I Te Ao Kobatu Weaving: An Art Form Derived from Mātauranga Māori as a Gift from the Ancestors* Te Kaharoa, 1(1). Doi: 10.24135/tekaharoa.v1i1.137
<https://www.tekaharoa.com/index.php/tekaharoa/article/view/137> [Accessed 18.02.19]
- Triberti, S., & Riva, G. (2016) *Being Present in Action: A Theoretical Model About the "Interlocking" Between Intentions and Environmental Affordances*. Frontiers in psychology, 6, 2052. doi:10.3389/fpsyg.2015.02052
<https://www.frontiersin.org/articles/10.3389/fpsyg.2015.02052/full> [Accessed 16.05.19]
- Watkins, M. (2017) *Psychosocial Accompaniment* No 17: January-June 2017 Journal of Social and Political Psychology http://www.academic-foresights.com/Psychosocial_Accompaniment.html [Accessed 12.02.20]
- Wiggins, A. Crowston, K. (2015) *Surveying the citizen science landscape*. First Monday Peer-reviewed Journal of the Internet
<https://firstmonday.org/article/view/5520/4194#author> [Accessed 01.05.19]
- Zimmerman, C. & Cuddington, K. (2007) *Ambiguous, circular and polysemous: students' definitions of the "balance of nature" metaphor* Public Understanding of Science Sage Publications
<https://journals.sagepub.com/doi/pdf/10.1177/0963662505063022> [Accessed 16.07.19]

Podcast

- Gorse for the trees: How one man brought back a forest*
<https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018703481/gorse-for-the-trees-how-one-man-brought-back-a-forest> [Accessed 18.07.19]
- Neil MacGregor's History of the World in 100 Objects The Threshold of the Modern World (1375-1550 AD) *Tughra of Suleiman The Magnificent*
<https://www.bbc.co.uk/programmes/b00tn9vc> [Accessed 23.05.19]

PhD Dissertation Thesis

- Fitzgerald, C. (2018) *PhD by Practice The Ecological Turn: Living well with forests to explain eco-social art practices* <https://hollywoodforest.com/2018/11/21/phd-by-practice-the-ecological-turn-living-well-with-forests-to-explain-eco-social-art-practices/> [Accessed 16.04.19]
- Smith, S.M. (2007) *Hei Whenua Ora: Hapu and iwi approaches for reinstating valued ecosystems within cultural landscape*. PhD Thesis, Massey University, Palmerston North, Aotearoa/New Zealand

Press

- Berners-Lee, M. & Clark, D. (2010) *What is carbon footprint?*
<https://www.theguardian.com/environment/blog/2010/jun/04/carbon-footprint-definition> [Accessed 06.06.19]

- Brown, K. (2019) *Everyone at a Place Like Art Basel Is Complicit: Artists May Be Making Art About Climate Change, But Nobody at the Fair Wants to Talk About It.* <https://news.artnet.com/market/art-basel-climate-change-1571881> [Accessed 02.08.19]
- Halperin, J. (2019) *It's Hard to Make Good Art about Climate Change. The Lithuanian Pavilion at the Venice Biennale is a Powerful Exception* Art Net News https://news.artnet.com/exhibitions/lithuanian-pavilion-1543168?utm_content=buffer92454&utm_medium=social&utm_source=facebook.com&utm_campaign=news&fbclid=IwAR2F866Sbo54VevbDakAwBIIdXL_Ryhbe31YmdwD79PdaEfr7w0sCt4ZBy3U [Accessed 17.05.19]
- Jacobs, T. 2007 *Belief in 'Balance of Nature' Hard to Shake* Pacific Standard <https://psmag.com/environment/belief-in-balance-of-nature-hard-to-shake-4785> [Accessed 16.07.19]
- MacFarlane, R. (2017) *Violent spring: The nature book that predicted the future* <https://www.theguardian.com/books/2017/apr/15/the-peregrine-by-jabaker-nature-writing> [accessed 09.04.2018]
- Milman, O. (2018) *Americans: the next climate migrants Where should you move to save yourself from climate change?* The Guardian <https://www.theguardian.com/environment/2018/sep/24/climate-change-where-to-move-us-avoid-floods-hurricanes> [Accessed 06.06.19]
- Ross, P. (2015) *Tragedy on South Uist: the storm that swept a family away* The Guardian <https://www.theguardian.com/lifeandstyle/2015/oct/10/south-uist-storm-tragedy-10-years-on-peter-ross> [Accessed 16.04.19]
- Savory Institute Ruminations Newsletter (2019) *Regenerative vs sustainable agriculture: What's the difference? 'The intention to regenerate or renew the productivity and growth potential of what is being renewed'* <https://www.savory.global/regenerative-agriculture-sustainable-agriculture-differences-holistic-management/> [Accessed 24.08.19]
- Te Awa Taupua Act 2017 (Whanganui River Claims Settlement)* <http://www.legislation.govt.nz/act/public/2017/0007/latest/whole.html> (Accessed online 24.07.18)
- Te Tai Ao - Natural Environment* <http://www.maramatanga.ac.nz/project/te-awaroa-1000-rivers-state-ora-2050> [Accessed 16.07.18]
- The Herald [online 27 August 2017] *Revealed: Climate Change and the terrifying risk to Scotland* <https://www.heraldscotland.com/news/15497924.revealed-climate-change-and-the-terrifying-risk-to-scotland/> [Accessed 14.03.19]
- The Third Wai o Papa Exhibition* <https://www.deepsouthchallenge.co.nz/news-updates/third-wai-o-papa-exhibition-project-hope-maori-coastal-communities> [Accessed 03.04.19]
- Weinstein, J.N., Geller, A., Negussie, Y., Baci, A. (Eds) (2017) *Communities in Action: Pathways to Health Equity Policies to Support Community Action*. National Academies Press, Washington, DC <https://www.nap.edu/catalog/24624/communities-in-action-pathways-to-health-equity> [Accessed 12.07.19]
- Whanganui River given legal status of a person under unique Treaty of Waitangi settlement*. New Zealand Herald 15.03.17 https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11818858 [Accessed online 24.07.18]

MA Dissertation Thesis

- Nepe, T. (1991) *E Hao Nei e Tenei Reanga: Te Toi Huarewa Tipuna: Kaupapa Māori, an Educational Intervention System* MA Thesis, University of Auckland <https://www.worldcat.org/title/e-hao-nei-e-tenei-reanga-te-toi-huarewa-tipuna-kaupapa-maori-an-educational-intervention-system/oclc/663714618> [Accessed 09.08.18]

Video

- Abramović, M. (2010) *What is performance art?* MOMA, New York
<https://www.khanacademy.org/humanities/global-culture/conceptual-performance/v/moma-abramovic-what-is-performance-art> [Accessed online 30.04.19]
- Barad, K. (2018) *On Touching: The Alterity Within*, Studium Generale Rietveld Academie
<https://www.youtube.com/watch?v=u7LxSwjEBY> [Accessed online 10.05.19]
- Creative Time Summit Toronto: Of Homelands and Revolution | Land – Hubana Smith* (2017)
<https://www.youtube.com/watch?v=INQlvyevm2g> [Accessed 03.11.17]
- Fool and Dreamers: Regenerating a native forest*
<https://www.youtube.com/watch?v=P3WmuFHdipU> [Accessed 18.07.19]
- Homer and the Oral Traditions* <https://www.youtube.com/watch?v=K08vUnVpHcw>
[Accessed 21.05.19]
- TATE (2008) *Tania Bruguera Tatlin's Whisper #5*
<https://www.tate.org.uk/art/artworks/bruguera-tatlins-whisper-5-t12989>
[Accessed 23.10.19]
- The Graduate Centre, CUNY (2016) *The Artist as Activist: Tania Bruguera in Conversation with Claire Bishop* <https://www.youtube.com/watch?v=4raYhes7OwI>
[Accessed 23.10.19]

Websites

- AMFAB (2018) *In Community: Understanding the Role of an Artist's Studio Space*
<http://amfabarts.com/blog2/2018/4/27/in-community-understanding-the-role-of-an-artists-studio-space> [Accessed 19.04.19]
- Biggs, I. (2014) *Deep Mapping - A Partial View*.
<http://www.iainbiggs.co.uk/2014/10/deep-mapping-a-partial-view/> [accessed online 07.11.16]
- Culhane, A-M. *A Field of Wheat* <https://www.amculhane.co.uk/pages/amfieldwheat.htm>
[Accessed 02.05.19]
- Carbon Brief (2019) *How do climate models work?* <https://www.carbonbrief.org/qa-how-do-climate-models-work#types> [Accessed 16.07.19]
- Dan Hikuroa on Listening for the Voice of the River*
<https://impolitical.com/2017/10/23/dan-hikuroa-on-listening-for-the-voice-of-the-river/> [Accessed 16.07.18]
- Eco-Labs.org <http://www.eco-labs.org/about/eco-literacy> [Accessed 17.04.19]
- Education Gazette Eds. (2017) *Two lifetimes of learning and sharing*
<https://gazette.education.govt.nz/articles/two-lifetimes-of-learning-and-sharing/> [Accessed 20.05.19]
- Encyclopaedia Britannica *Phenology* <https://www.britannica.com/science/phenology>
[Accessed 01.05.19]
- Harpeth Conservancy (2019) *Riparian Zones: What are they and why protect them?*
<http://www.harpethconservancy.org/programs/restoration/riparian>
[Accessed 17.07.19]
- Heeswijk, J van.: 'Living as a creator rather than consumer'
http://www.jeannetworks.net/essays/art_and_social_change%3A_learning_collectively_to_take_responsibility/ [Accessed 25.10.2018]
- Heeswijk, J. van. Spatial Agency <http://www.spatialagency.net/database/van-heeswijk>
[Accessed 11.04.18]
- Hinewai Reserve <https://www.hinewai.org.nz/> [Accessed 18.07.19]
- More Than Green*, the multimedia encyclopaedia of environmental, social, economic & cultural sustainability in the urban environment <http://www.morethangreen.es/en/ideology/four-sustainabilities->

- [cultural-economic-social-environmental-sustainability/#sthash.kR77WzY3.dpbs](#) [Accessed 22.02.19]
- NASA: *Goddard Institute for Space Studies* <https://earthobservatory.nasa.gov/world-of-change/decadaltemp.php> [Accessed 01.05.19]
- National Geographic *Citizen Science* <https://www.nationalgeographic.org/encyclopedia/citizen-science/> [Accessed 01.05.19]
- Northcote Development *The Awataha Greenway Project* <https://northcotedevelopment.co.nz/blog/the-awataha-greenway-project/> [Accessed 28.07.19]
- O'Connell, P. *Drawing the Water* 2012. A % For Art Public Art Project for Milltown, Co. Kerry <http://paulineoconnell.com/drawing-the-water/>
- Petition of Danny Tahau Jobe: Referendum to include Aotearoa in the official name of New Zealand* https://www.parliament.nz/en/pb/petitions/document/PET_78333/petition-of-danny-tahau-jobe-referendum-to-include-aotearoa [Accessed 20.05.19]
- Potted History Of Experiences Of Hebridean People* <https://www.hebridespeople.com/history/> [Accessed 20.05.19] and <https://blosslynspage.wordpress.com/2015/11/19/a-monument-to-land-riders/> [Accessed 20.05.19]
- Scottish History of the Highland Clearances* <https://www.britannica.com/topic/Highland-Clearances> [Accessed 20.05.19]
- Scottish Natural Heritage: Notes about Machair <https://www.nature.scot/landscapes-and-habitats/habitat-types/coast-and-seas/coastal-habitats/machair> [Accessed 24.04.19]
- Social Sculpture Research Unit <https://www.social-sculpture.org/> [Accessed 04.06.19]
- Synopsis of The Iliad https://www.ancient-literature.com/greece_homer_iliad.html [Accessed 21.05.19]
- The evacuation of St Kilda in 1930 https://www.kilda.org.uk/evacuation.htm#.XPmDyNNKg_U [Accessed 06.06.19]
- Thompson, E. (2017) *The Enactive Approach* The Brains Blog <http://philosophyofbrains.com/2017/01/27/the-enactive-approach.aspx> [Accessed 11.10.19]
- Tughra (Official Signature of Sultan Suleiman the Magnificent in Istanbul. Khan Academy <https://www.khanacademy.org/humanities/art-islam/islamic-art-late-period/v/getting-lost> [Accessed 23.05.19]
- U of M Extension Citizen Science (2017) *Citizen Science in the Classroom: Phenology* <https://www.youtube.com/watch?v=jSFfvpHXw9I> [Accessed 01.05.19]
- Veltman, C. (2016) *How Two Santa Cruz Artists Changed the Course of Environmental History* <https://www.kqed.org/arts/11314278/how-two-santa-cruz-artists-changed-the-course-of-environmental-history?fbclid=IwAR0jXI7e6vTWVVM3GMUaU266J5jQNj8IHytFdW9lC8-ZEvwdCCtx2O9elQ8> [Accessed 23.04.19]
- Wahl D.C. (2016) Re-generation <https://gaiaeducation.org/wp-content/uploads/2017/11/PM89-Regeneration-pp13-16-1.pdf> [Accessed 16.07.19]
- Wahl, D.C. (2018) *Sustainability is not Enough: We need Regenerative Cultures* Insurge Intelligence <https://www.resilience.org/stories/2018-05-23/sustainability-is-not-enough-we-need-regenerative-cultures/> [Accessed 17.07.19]
- Whitehead, F. (2006) *What do Artists Know* The Embedded Artist Project http://embeddedartistproject.com/What_do_artists_know.pdf [01.05.19]

Corporate

- Auckland Council (2013) *Caring for Urban Streams – Guide 1: Flooding*
<https://www.aucklandcouncil.govt.nz/environment/stormwater/docsbmbpenvironmental1/caring-for-urban-streams-guide-1-flooding.pdf> [Accessed 22.09.19]
- Climate Challenge Fund (2018) *Carbon Literacy Guide*
<https://www.keepsotlandbeautiful.org/media/1561746/climate-literacy-guide-part-3-intro-final-low-res-180618.pdf> [Accessed 19.09.19]
- Climate Communication Science and Outreach (2019) *How we know the warming is human-induced* <https://www.climatecommunication.org/climate/human-induced-warming/> [Accessed 16.07.19]
- Comhairle nan Eilean Siar Outer Hebrides (2018) *Fact File: Population Overview*
<https://www.cne-siar.gov.uk/strategy-performance-and-research/outer-hebrides-factfile/population/overview/> [Accessed 06.06.19]
- Intergovernmental Panel on Climate Change (2018) *Special Report IPCC on the impacts of global warming of 1.5°C* IPCC, Switzerland
https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf [Accessed 18.07.19]
- NRC Solutions *Naturally Resilient Communities: Daylighting Rivers and Streams*
http://nrcsolutions.org/wp-content/uploads/2017/03/NRC_Solutions_Daylighting_Rivers.pdf [Accessed 18.07.19]
- Project for Public Spaces *What is Place-making?* <https://www.pps.org/article/what-is-placemaking> [Accessed 24.09.19]
- Regenesis Institute (2019) *Bringing Human Communities into alignment with earth's natural systems* <https://regenerat.es/regenerative-development/> [Accessed 04.04.19]
- Society for Ecological Restoration International Science & Policy Working Group. 2004. *The SER International Primer on Ecological Restoration*. www.ser.org & Tucson: Society for Ecological Restoration International.
https://www.ctahr.hawaii.edu/littonc/PDFs/682_SERPrimer.pdf [Accessed 06.07.19]
- Terra Genesis International (2016) *Regenerative Agriculture: A Definition*
<http://www.regenerativeagriculturedefinition.com/> [Accessed 17.07.19]
- The Carbon Cycle Institute <https://www.carboncycle.org/carbon-farming/> [Accessed 17.07.19]
- The Royal Society (2019) *Climate Change: Evidences and Causes*
<https://royalsociety.org/topics-policy/projects/climate-change-evidence-causes/basics-of-climate-change/> [Accessed 27.07.19]
- United Nations World Commission on Environment and Development (1987) *Brundtland Report Our Common Future* 1987 Para 27, Chapter 2, Section 1V
http://netzwerk-n.org/wp-content/uploads/2017/04/0_Brundtland_Report-1987-Our_Common_Future.pdf [Accessed 16.07.19]
- United Nations *The Sustainable Development Agenda 17 Goals to Sustain our World*
<https://www.un.org/sustainabledevelopment/development-agenda/> [Accessed 17.08.18]
- US Global Change Research Programme (2009) *Climate Literacy The Essential Principles of Climate Science*
https://downloads.globalchange.gov/Literacy/climate_literacy_highres_english.pdf [Accessed 18.04.19]